



National Science Foundation
WHERE DISCOVERIES BEGIN



Graduate Students and Postdoctorates in Science and Engineering: Fall 2009

Detailed Statistical Tables | NSF 12-300 | December 2011

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General Notes

During the production of this report the America COMPETES Reauthorization Act of 2010 was signed into law. Section 505 of the bill renames the Division of Science Resources Statistics as the National Center for Science and Engineering Statistics (NCSES). The Center retains its reporting line to the Directorate for Social, Behavioral and Economic Sciences within the National Science Foundation. The new name signals the central role of NCSES in the collection, interpretation, analysis, and dissemination of objective data on the science and engineering enterprise.

Data presented here are derived from the annual National Science Foundation–National Institutes of Health Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Unless otherwise specified, data published here represent estimates of total graduate enrollment as of fall 2009 in science, engineering, and selected health fields in 13,285 graduate units (departments, research centers, degree-granting programs, and affiliate health facilities) at 575 academic institutions in the United States and outlying areas.

The survey was refined in 2007 to improve reporting: new fields were added, and some fields were reclassified. Because of these changes, the 2007 data are presented two ways in multi-year tables:

- "2007new" shows the data as they were collected using the new methodology.
- "2007old" shows the data as they would have been collected in prior years.

The 2009 and 2008 data should be comparable to "2007new" data.

Beginning in 2008, the tables that provide data by institutions no longer list names of the non-responding institutions, although their data are imputed and included in the totals for all institutions.

Collection of these graduate enrollment and postdoctoral researcher data began in 1966, and the survey has been modified periodically since then. Appendix A, "Technical Notes," provides more detailed information on the survey over the years. The latest data for prior years are published in this report; only these data should be used in historical analyses.

Data from the GSS fall 1972 through fall 2009 are also available in public-use files and from the WebCASPAR system at <https://webcaspar.nsf.gov/>.

Data Tables

Table **Graduate enrollment in all institutions**

Graduate students

by field: 1975–2009

1 science, engineering, and health

2 science

3 engineering

male students, by field: 1977–2009

4 science, engineering, and health

5 science

6 engineering

female students, by field: 1977–2009

7 science, engineering, and health

8 science

9 engineering

Full-time graduate students

by field 1975–2009

10 science, engineering, and health

11 science

12 engineering

male students, by field: 1977–2009

13 science, engineering, and health

14 science

15 engineering

female students, by field: 1977–2009

16 science, engineering, and health

17 science

18 engineering

U.S. citizens and permanent residents, by field: 1980–2009

19 science, engineering, and health

20 science

21 engineering

temporary visa holders, by field: 1980–2009

22 science, engineering, and health

23 science

24 engineering

Graduate students: 2003–09

25 by detailed field

26 male

27 female

28 public institutions

29 private institutions
30 by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents
31 male
32 female
full-time enrollment
33 by detailed field
34 male
35 female
36 temporary visa holders
37 by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents
38 by field and primary source of support
39 by field and primary mechanism of support
40 by primary mechanism and primary source of support, science and engineering fields
41 by primary mechanism and primary source of support, health fields
first-time, full-time enrollment
42 by detailed field
43 U.S. citizens and permanent residents
44 temporary visa holders
45 by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents

Graduate students: 2009

citizenship and race/ethnicity of U.S. citizens and permanent residents
46 by detailed field
47 male
48 female
by institution and geographic area
49 science
50 engineering

Graduate students in doctorate-granting institutions

51 by detailed field: 2003–09
52 public institutions
53 private institutions
by citizenship and race/ethnicity of U.S. citizens and permanent residents
by enrollment status: 2003–09
54 science and engineering
55 health
56 by detailed fields: 2009

Full-time graduate students in doctorate-granting institutions

57 by detailed field: 2003–09
58 U.S. citizens and permanent residents

- 59 temporary visa holders
- 60 by field and primary source of support: 2003–09
- 61 by sex, primary source of support, and field: 2009
- 62 science, engineering, and health
- 63 science
- 64 engineering
- 65 by primary mechanism of support
- 66 by field: 2003–09
- 67 by detailed field: 2009
- 68 by primary mechanism and primary source of support: 2003–09
- 69 science and engineering
- 70 health

Institutional rankings

- 68 by graduate enrollment in 2009

Postdoctoral appointees

- 69 by detailed field: 2003–09
- 70 by detailed field, primary source of support, and citizenship: 2009
- 71 institution rankings by number of appointees, by field: 2009

Nonfaculty research staff with doctorates

- 72 by detailed field: 2003–09

Graduate students in historically black colleges and universities (HBCUs)

- 73 by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009
 - black, non-hispanic U.S. citizens and permanent residents in all institutions and in HBCU
- 74 by field: 2003–09
- 75 by field and sex: 2005–09
- 76 full-time enrollment by field: 2003–09
- 77 full-time enrollment by field and sex: 2005–09

TABLE 1. Graduate students in science, engineering, and health fields in all institutions, by field: 1975–2009

Year	All science, engineering, and health	Science and engineering			Health		
		Total	Science	Engineering	Total	Clinical medicine	Other health
1975	328,510	302,981	234,649	68,332	25,529	5,590	19,939
1976	333,716	305,398	238,675	66,723	28,318	6,055	22,263
1977	345,374	311,689	242,932	68,757	33,685	6,240	27,445
1978 ^a	339,912	304,252	236,465	67,787	35,660	7,194	28,466
1979	357,578	319,043	247,235	71,808	38,535	8,054	30,481
1980	367,078	325,600	251,265	74,335	41,478	8,751	32,727
1981	375,130	331,989	252,404	79,585	43,141	8,771	34,370
1982	382,291	338,866	255,146	83,720	43,425	8,561	34,864
1983	390,432	346,966	255,820	91,146	43,466	8,481	34,985
1984	394,670	349,642	256,903	92,739	45,028	8,630	36,398
1985	404,021	357,991	261,973	96,018	46,030	9,198	36,832
1986	415,520	367,982	266,077	101,905	47,538	9,227	38,311
1987	421,497	373,239	269,256	103,983	48,258	9,773	38,485
1988	424,523	375,163	272,309	102,854	49,360	10,071	39,289
1989	434,478	382,642	278,577	104,065	51,836	10,200	41,636
1990	452,113	397,041	289,383	107,658	55,072	10,943	44,129
1991	471,212	412,592	299,057	113,535	58,620	11,696	46,924
1992	493,522	430,517	312,478	118,039	63,005	12,597	50,408
1993	504,304	435,723	318,851	116,872	68,581	14,213	54,368
1994	504,399	431,142	318,118	113,024	73,257	15,037	58,220
1995	499,640	422,466	315,265	107,201	77,174	15,538	61,636
1996	494,079	415,181	311,957	103,224	78,898	15,363	63,535
1997	487,208	407,630	306,482	101,148	79,578	15,470	64,108
1998	485,627	404,856	304,818	100,038	80,771	16,643	64,128
1999	493,256	411,182	309,491	101,691	82,074	17,276	64,798
2000	493,311	413,536	309,424	104,112	79,775	16,407	63,368
2001	509,607	429,229	319,736	109,493	80,378	17,363	63,015
2002	540,404	454,834	335,166	119,668	85,570	19,166	66,404
2003	567,121	474,645	347,268	127,377	92,476	20,574	71,902
2004	574,463	475,873	352,307	123,566	98,590	20,866	77,724
2005	582,226	478,275	357,710	120,565	103,951	21,414	82,537
2006	597,643	486,287	363,246	123,041	111,356	23,441	87,915
2007old ^b	607,823	502,375	372,120	130,255	105,448	24,616	80,832
2007new ^b	619,499	516,199	384,523	131,676	103,300	22,751	80,549
2008	631,489	529,275	391,419	137,856	102,214	23,939	78,275
2009	631,645	545,685	401,008	144,677	85,960	24,125	61,835

^a Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.^b In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 2. Graduate students in science fields in all institutions, by field: 1975–2009

Year	Total	Agricultural sciences			Biological sciences			Communication ^a		Computer sciences		Earth, atmospheric, and ocean sciences		Family and consumer sciences/ human sciences ^a		Mathematical sciences		Multidisciplinary/ interdisciplinary studies ^a			Physical sciences		Psychology		Social sciences		
		Total	Agriculture	Agri. sciences	Total	Biology	Biological sciences	Total	Commun.	Communi- cation	Total	Computer	Computer sciences	Total	Atmospheric	Ocean sci.	Total	Human	Human sciences	Total	Mathemati- cal sciences	Total	Neurosci.	Total	Physical sci.	Total	Psychology
1975	234,649	10,804	46,185	ne	8,415	12,079	ne	16,892	ne	26,310	36,191	77,773															
1976	238,675	11,427	47,453	ne	8,627	12,809	ne	17,071	ne	26,641	37,458	77,189															
1977	242,932	11,812	48,975	ne	9,108	13,446	ne	16,052	ne	26,864	38,617	78,058															
1978 ^b	236,465	11,981	47,665	ne	9,847	13,268	ne	14,812	ne	26,282	37,522	75,088															
1979	247,235	12,365	47,932	ne	11,690	13,731	ne	15,031	ne	26,701	39,766	80,019															
1980	251,265	12,689	47,261	ne	13,578	14,051	ne	15,311	ne	26,934	40,610	80,831															
1981	252,404	12,585	46,302	ne	16,437	14,263	ne	15,881	ne	27,360	40,666	78,910															
1982	255,146	12,826	45,627	ne	19,812	15,018	ne	17,157	ne	28,188	40,073	76,445															
1983	255,820	12,728	45,253	ne	23,333	15,443	ne	17,358	ne	29,463	40,905	71,337															
1984	256,903	12,528	45,353	ne	25,526	15,500	ne	17,443	ne	30,061	40,931	69,561															
1985	261,973	11,846	45,709	ne	29,769	15,414	ne	17,563	ne	30,987	40,721	69,964															
1986	266,077	11,771	46,302	ne	31,349	15,053	ne	17,949	ne	32,259	41,241	70,153															
1987	269,256	11,405	46,317	ne	32,051	14,357	ne	18,508	ne	32,741	42,612	71,265															
1988	272,309	11,438	47,126	ne	32,227	13,854	ne	19,077	ne	32,975	43,963	71,649															
1989	278,577	11,461	48,449	ne	32,482	13,630	ne	19,247	ne	33,629	45,528	74,151															
1990	289,383	11,563	49,602	ne	34,257	13,977	ne	19,774	ne	34,082	48,167	77,961															
1991	299,057	11,766	51,365	ne	34,681	14,466	ne	19,952	ne	34,724	51,343	80,760															
1992	312,478	12,153	53,693	ne	36,325	15,324	ne	20,355	ne	35,357	53,484	85,787															
1993	318,851	12,305	55,950	ne	36,213	15,721	ne	20,000	ne	35,328	54,557	88,777															
1994	318,118	12,611	57,676	ne	34,158	15,957	ne	19,573	ne	34,466	54,554	89,123															
1995	315,265	12,768	58,344	ne	33,458	15,716	ne	18,504	ne	33,399	53,641	89,435															
1996	311,957	12,301	57,749	ne	34,626	15,183	ne	18,008	ne	32,333	53,122	88,635															
1997	306,482	12,203	56,705	ne	35,991	14,548	ne	16,719	ne	31,105	53,126	86,085															
1998	304,818	12,168	56,695	ne	38,027	14,258	ne	16,485	ne	30,575	52,557	84,053															
1999	309,491	12,312	56,959	ne	42,478	14,083	ne	16,257	ne	30,691	51,727	84,984															
2000	309,424	12,023	56,282	ne	47,350	13,941	ne	15,650	ne	30,385	50,466	83,327															
2001	319,736	12,235	57,639	ne	52,196	13,841	ne	16,651	ne	31,038	50,454	85,682															
2002	335,166	12,698	61,088	ne	55,269	14,240	ne	18,163	ne	32,341	51,152	90,215															
2003	347,268	13,197	64,701	ne	53,696	14,620	ne	19,465	ne	34,298	52,162	95,129															
2004	352,307	13,445	66,565	ne	50,016	15,131	ne	19,931	ne	35,761	54,126	97,332															
2005	357,710	13,123	68,479	ne	47,978	14,836	ne	20,210	ne	36,375	57,282	99,427															
2006	363,246	13,016	69,941	ne	47,653	14,920	ne	20,815	ne	36,901	57,653	102,347															
2007old ^a	372,120	13,222	71,663	ne	48,959	14,675	ne	21,335	ne	37,111	60,284	104,871															

TABLE 2. Graduate students in science fields in all institutions, by field: 1975–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
2007new ^a	384,523	13,528	71,932	7,303	48,246	14,100	2,780	20,975	4,484	1,584	36,824	59,617	103,150
2008	391,419	14,153	72,666	8,444	49,553	14,389	3,549	21,400	5,559	2,012	37,319	58,991	103,384
2009	401,008	15,200	73,304	9,418	51,161	14,839	3,794	22,226	6,557	2,356	38,149	56,184	107,820

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

^b Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 3. Graduate students in engineering fields in all institutions, by field: 1975–2009

Year														Metal-lurgical/ materials			
	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec		
1975	68,332	1,670	631	na	883	5,095	12,560	16,320	1,746	11,663	8,601	2,376	412	1,636	302	4,437	
1976	66,723	1,477	690	na	895	5,271	11,995	15,926	1,759	10,687	8,313	2,398	515	1,600	376	4,821	
1977	68,757	1,518	754	na	855	5,273	12,335	17,406	1,737	10,438	8,722	2,585	452	1,491	379	4,812	
1978 ^b	67,787	1,463	788	na	920	5,431	12,358	17,127	1,844	9,494	8,638	2,592	416	1,404	428	4,884	
1979	71,808	1,481	787	na	1,004	5,685	12,822	17,715	1,681	10,729	9,251	2,778	389	1,318	424	5,744	
1980	74,335	1,737	789	na	964	6,038	13,097	19,132	1,796	9,698	9,888	2,934	413	1,241	503	6,105	
1981	79,585	1,883	842	na	1,017	6,526	14,089	20,113	1,965	9,737	10,618	3,152	462	1,283	521	7,377	
1982	83,720	1,941	911	na	1,085	7,222	14,122	21,927	2,130	9,577	11,467	3,154	449	1,301	586	7,848	
1983	91,146	2,305	1,001	na	1,220	7,590	14,910	25,295	2,261	9,247	12,911	3,477	524	1,203	737	8,465	
1984	92,739	2,340	989	na	1,315	7,400	15,192	26,388	2,153	9,282	13,855	3,673	502	1,234	744	7,672	
1985	96,018	2,538	983	na	1,335	7,177	14,902	28,203	2,098	10,525	14,157	3,959	489	1,220	782	7,650	
1986	101,905	2,804	1,118	na	1,487	7,043	14,976	29,969	2,362	11,569	15,713	4,236	512	1,265	747	8,104	
1987	103,983	3,015	1,126	na	1,628	7,141	14,682	31,399	2,343	12,353	16,366	4,397	513	1,279	818	6,923	
1988	102,854	3,223	1,096	na	1,708	6,643	14,811	32,035	2,386	11,575	16,151	4,381	489	1,303	742	6,311	
1989	104,065	3,524	1,092	na	1,867	6,482	14,909	33,257	2,077	11,333	16,265	4,635	418	1,323	665	6,218	
1990	107,658	3,934	985	na	2,097	6,768	15,542	33,722	2,020	11,555	16,879	4,983	437	1,278	670	6,788	
1991	113,535	4,120	1,023	na	2,199	7,157	17,398	35,111	2,154	12,996	17,730	5,203	489	1,282	705	5,968	
∞	118,039	4,036	1,053	na	2,492	7,433	19,572	36,428	2,218	13,826	18,637	5,550	437	1,286	737	4,334	
	116,872	3,940	1,053	na	2,640	7,554	19,583	35,290	2,180	13,905	18,477	5,410	427	1,306	725	4,382	
	113,024	3,715	1,095	na	2,716	7,639	19,925	33,067	2,089	13,992	17,761	5,228	424	1,246	624	3,503	
	107,201	3,343	1,076	na	2,693	7,452	19,218	30,861	1,955	13,475	16,363	4,956	373	1,154	610	3,672	
	103,224	3,208	1,055	na	2,689	7,408	18,528	29,941	1,751	12,675	15,509	4,747	371	980	562	3,800	
	101,148	3,083	991	na	2,797	7,288	17,193	30,787	1,647	11,957	15,045	4,688	348	868	561	3,895	
	100,038	3,137	975	na	2,855	7,093	16,517	31,384	1,701	11,221	14,696	4,680	304	821	571	4,083	
	101,691	3,349	986	na	3,069	6,883	16,226	31,822	1,627	11,803	14,956	4,481	328	830	642	4,689	
	104,112	3,407	943	na	3,197	7,056	16,451	33,611	1,632	12,119	15,235	4,377	287	792	627	4,378	
	109,493	3,451	947	na	3,599	6,913	16,665	36,100	1,798	12,940	15,852	4,721	240	801	656	4,810	
	119,668	3,685	952	na	4,338	7,414	17,713	39,948	2,121	14,033	17,139	4,992	267	795	766	5,505	
	127,377	4,048	1,058	na	5,301	7,516	18,890	41,763	2,240	14,313	18,393	5,131	278	885	849	6,712	
	123,566	4,089	1,041	na	5,807	7,452	18,561	38,995	2,198	13,852	17,852	5,059	308	971	845	6,536	
	120,565	4,170	1,059	na	6,067	7,173	18,114	37,450	1,951	13,650	17,373	5,160	279	1,013	808	6,298	
	123,041	4,482	1,073	na	6,482	7,261	17,802	38,265	2,046	13,829	17,919	5,268	244	1,099	813	6,458	
	2007old ^a	130,255	4,616	1,126	na	6,881	7,383	19,867	40,207	1,843	14,290	18,366	5,365	307	1,208	1,014	7,782

TABLE 3. Graduate students in engineering fields in all institutions, by field: 1975–2009

Year														Metal-lurgical/materials		
	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^b	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec	
2007new ^a	131,676	4,616	1,126	4,601	6,904	7,584	16,071	40,588	1,806	14,474	18,347	5,314	222	1,180	1,014	7,829
2008	137,856	4,902	1,233	5,905	7,339	7,892	16,931	41,164	2,099	15,692	19,585	5,539	290	1,201	1,009	7,075
2009	144,677	5,266	1,303	6,804	7,904	8,188	18,638	41,218	2,168	15,825	21,243	5,863	312	1,243	1,190	7,512

na = not applicable; data were not collected at this level of detail.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

^b Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 4. Male graduate students in science, engineering, and health fields in all institutions, by field: 1977–2009

Year	All science, engineering, and health	Science and engineering			Health		
		Total	Science	Engineering	Total	Clinical medicine	Other health
1977	244,924	233,775	168,724	65,051	11,149	3,575	7,574
1978	NA	NA	NA	NA	NA	NA	NA
1979	240,839	229,766	163,845	65,921	11,073	4,035	7,038
1980	242,956	231,207	163,212	67,995	11,749	4,359	7,390
1981	243,558	232,144	160,306	71,838	11,414	4,297	7,117
1982	246,298	235,297	160,354	74,943	11,001	4,022	6,979
1983	250,928	240,463	159,126	81,337	10,465	3,849	6,616
1984	252,653	242,112	159,672	82,440	10,541	3,741	6,800
1985	258,216	247,370	162,435	84,935	10,846	3,913	6,933
1986	264,733	253,607	164,075	89,532	11,126	4,047	7,079
1987	267,941	256,072	165,060	91,012	11,869	4,520	7,349
1988	265,390	253,925	164,199	89,726	11,465	4,413	7,052
1989	268,725	256,770	166,313	90,457	11,955	4,255	7,700
1990	275,672	263,319	170,340	92,979	12,353	4,661	7,692
1991	284,897	271,762	173,925	97,837	13,135	4,980	8,155
1992	294,222	280,305	179,486	100,819	13,917	5,292	8,625
1993	294,476	279,185	180,001	99,184	15,291	6,033	9,258
1994	288,355	272,031	177,057	94,974	16,324	6,369	9,955
1995	279,305	262,256	173,068	89,188	17,049	6,443	10,606
1996	271,660	253,510	168,540	84,970	18,150	6,614	11,536
1997	264,497	245,619	163,191	82,428	18,878	6,663	12,215
1998	261,019	241,429	160,379	81,050	19,590	6,922	12,668
1999	262,675	242,786	160,982	81,804	19,889	7,075	12,814
2000	262,109	243,057	159,691	83,366	19,052	6,497	12,555
2001	271,155	251,810	164,574	87,236	19,345	6,775	12,570
2002	287,059	266,217	171,516	94,701	20,842	7,391	13,451
2003	298,682	276,248	176,458	99,790	22,434	7,751	14,683
2004	296,714	274,008	177,714	96,294	22,706	7,395	15,311
2005	295,291	271,967	178,297	93,670	23,324	7,339	15,985
2006	299,818	275,181	180,084	95,097	24,637	7,908	16,729
2007old ^a	308,152	284,080	183,799	100,281	24,072	8,310	15,762
2007new ^a	312,009	288,926	187,722	101,204	23,083	7,401	15,682
2008	320,310	297,278	190,959	106,319	23,032	7,592	15,440
2009	328,525	307,936	196,577	111,359	20,589	7,680	12,909

NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 5. Male graduate students in science fields in all institutions, by field: 1977–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
1977	168,724	9,671	32,301	ne	7,549	11,169	ne	11,933	ne	na	22,823	20,518	52,760
1978	NA	NA	NA	ne	NA	NA	ne	NA	ne	na	NA	NA	NA
1979	163,845	9,660	30,115	ne	9,367	10,846	ne	11,009	ne	na	22,206	19,424	51,218
1980	163,212	9,783	29,034	ne	10,491	10,844	ne	11,247	ne	na	22,338	19,027	50,448
1981	160,306	9,700	27,743	ne	12,228	10,847	ne	11,400	ne	na	22,349	17,900	48,139
1982	160,354	9,671	26,549	ne	14,366	11,295	ne	12,079	ne	na	22,769	16,976	46,649
1983	159,126	9,506	26,013	ne	16,719	11,548	ne	12,158	ne	na	23,580	16,648	42,954
1984	159,672	9,308	25,959	ne	18,653	11,628	ne	12,275	ne	na	23,902	16,180	41,767
1985	162,435	8,769	25,932	ne	22,208	11,489	ne	12,209	ne	na	24,478	15,597	41,753
1986	164,075	8,722	25,974	ne	23,497	11,108	ne	12,470	ne	na	25,395	15,377	41,532
1987	165,060	8,367	26,013	ne	24,036	10,581	ne	12,912	ne	na	25,624	15,683	41,844
1988	164,199	8,249	25,997	ne	24,033	10,054	ne	13,301	ne	na	25,473	15,502	41,590
1989	166,313	8,224	26,348	ne	24,494	9,776	ne	13,262	ne	na	25,824	15,673	42,712
1990	170,340	8,138	26,687	ne	26,058	9,860	ne	13,575	ne	na	26,012	15,822	44,188
1991	173,925	8,098	27,372	ne	26,391	10,015	ne	13,654	ne	na	26,156	16,556	45,683
1992	179,486	8,245	28,397	ne	27,854	10,478	ne	13,806	ne	na	26,508	16,650	47,548
1993	180,001	8,058	29,081	ne	27,782	10,695	ne	13,362	ne	na	26,122	16,567	48,334
1994	177,057	8,160	29,670	ne	26,071	10,638	ne	13,042	ne	na	25,299	16,416	47,761
1995	173,068	8,169	29,629	ne	25,325	10,282	ne	12,246	ne	na	24,314	15,877	47,226
1996	168,540	7,716	29,107	ne	25,829	9,736	ne	11,789	ne	na	23,288	15,375	45,700
1997	163,191	7,497	28,229	ne	26,110	9,132	ne	10,851	ne	na	22,257	15,507	43,608
1998	160,379	7,316	27,742	ne	27,225	8,690	ne	10,497	ne	na	21,822	15,095	41,992
1999	160,982	7,263	27,338	ne	29,933	8,358	ne	10,214	ne	na	21,776	14,456	41,644
2000	159,691	6,935	26,475	ne	33,270	8,188	ne	9,870	ne	na	21,270	13,594	40,089
2001	164,574	6,892	26,590	ne	36,894	7,949	ne	10,381	ne	na	21,702	13,147	41,019
2002	171,516	7,045	27,677	ne	39,244	7,993	ne	11,277	ne	na	22,275	13,435	42,570
2003	176,458	7,171	28,818	ne	38,880	8,082	ne	12,176	ne	na	23,520	13,383	44,428
2004	177,714	7,187	29,276	ne	36,739	8,199	ne	12,434	ne	na	24,461	13,970	45,448
2005	178,297	6,921	29,958	ne	35,933	7,941	ne	12,773	ne	na	24,649	13,963	46,159
2006	180,084	6,717	30,572	ne	35,591	7,916	ne	13,122	ne	na	24,896	13,950	47,320
2007 old ^a	183,799	6,778	31,012	ne	36,753	7,724	ne	13,554	ne	na	24,858	14,690	48,430

TABLE 5. Male graduate students in science fields in all institutions, by field: 1977–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
2007new ^a	187,722	6,901	31,178	2,656	36,229	7,450	453	13,297	1,924	721	24,715	14,501	47,697
2008	190,959	7,262	31,332	3,063	37,008	7,768	591	13,649	2,325	915	24,986	14,376	47,684
2009	196,577	7,715	31,486	3,389	38,108	8,024	591	14,247	2,748	1,092	25,458	13,648	50,071

na = not applicable; data were not collected at this level of detail. NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex. ne = not eligible; data were not collected for this field prior to 2007.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 6. Male graduate students in engineering fields in all institutions, by field: 1977–2009

Year	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal-lurgical/materials	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec
1977	65,051	1,485	725	na	772	4,893	11,507	16,696	1,650	9,683	8,449	2,401	434	1,434	365	4,557
1978	NA	NA	NA	na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	65,921	1,432	754	na	873	5,060	11,503	16,782	1,540	9,473	8,782	2,489	363	1,233	393	5,244
1980	67,995	1,663	757	na	799	5,358	11,732	18,149	1,645	8,343	9,354	2,629	385	1,160	462	5,559
1981	71,838	1,816	797	na	838	5,747	12,515	18,837	1,764	8,194	9,987	2,758	423	1,199	469	6,494
1982	74,943	1,831	852	na	867	6,319	12,373	20,376	1,864	7,958	10,748	2,729	409	1,215	544	6,858
1983	81,337	2,182	924	na	951	6,572	13,051	23,227	1,971	7,729	12,106	3,025	477	1,119	665	7,338
1984	82,440	2,208	902	na	1,029	6,426	13,165	24,175	1,861	7,674	12,899	3,201	458	1,146	684	6,612
1985	84,935	2,375	901	na	1,048	6,170	12,755	25,768	1,858	8,743	13,146	3,352	459	1,113	716	6,531
1986	89,532	2,604	1,032	na	1,143	5,996	12,829	27,061	2,065	9,472	14,554	3,552	476	1,142	699	6,907
1987	91,012	2,791	1,026	na	1,234	5,979	12,579	28,301	2,056	10,085	15,070	3,659	473	1,151	764	5,844
1988	89,726	2,996	1,002	na	1,274	5,564	12,517	28,757	2,119	9,449	14,749	3,618	441	1,176	693	5,371
1989	90,457	3,281	999	na	1,399	5,445	12,474	29,742	1,829	9,180	14,867	3,820	372	1,182	637	5,230
1990	92,979	3,645	879	na	1,555	5,615	12,853	30,007	1,721	9,367	15,437	4,085	379	1,123	637	5,676
1991	97,837	3,793	890	na	1,619	5,897	14,296	31,260	1,866	10,594	16,219	4,208	439	1,105	653	4,998
1992	100,819	3,688	899	na	1,885	6,036	15,918	32,151	1,913	11,118	16,939	4,476	394	1,100	672	3,630
1993	99,184	3,583	891	na	1,953	6,050	15,725	30,977	1,876	11,260	16,703	4,373	377	1,121	659	3,636
1994	94,974	3,357	884	na	2,030	6,110	15,714	28,958	1,783	11,135	15,938	4,145	374	1,093	565	2,888
1995	89,188	2,992	862	na	1,979	5,885	14,986	26,707	1,658	10,652	14,686	3,882	331	1,009	539	3,020
1996	84,970	2,856	828	na	1,973	5,757	14,228	25,712	1,456	9,906	13,873	3,670	317	827	502	3,065
1997	82,428	2,712	755	na	1,989	5,568	13,029	26,237	1,369	9,301	13,266	3,571	285	725	484	3,137
1998	81,050	2,755	715	na	2,002	5,366	12,415	26,512	1,370	8,769	12,934	3,550	249	687	516	3,210
1999	81,804	2,926	717	na	2,083	5,150	12,069	26,689	1,308	9,144	13,168	3,397	273	686	560	3,634
2000	83,366	2,938	661	na	2,141	5,181	12,174	28,075	1,290	9,406	13,403	3,336	241	636	540	3,344
2001	87,236	2,966	647	na	2,361	5,084	12,162	29,888	1,435	10,132	13,908	3,548	204	644	565	3,692
2002	94,701	3,169	664	na	2,825	5,419	12,808	32,678	1,691	10,957	15,056	3,741	230	647	659	4,157
2003	99,790	3,445	743	na	3,357	5,416	13,492	33,969	1,775	11,047	16,039	3,800	236	703	720	5,048
2004	96,294	3,489	730	na	3,624	5,346	13,120	31,794	1,733	10,622	15,396	3,738	266	775	711	4,950
2005	93,670	3,563	736	na	3,770	5,094	12,709	30,662	1,532	10,354	14,965	3,812	240	802	687	4,744
2006	95,097	3,773	723	na	3,996	5,102	12,379	31,239	1,595	10,363	15,434	3,878	201	885	678	4,851
2007old ^a	100,281	3,916	760	na	4,271	5,148	13,519	32,840	1,431	10,770	15,751	3,905	256	982	831	5,901

TABLE 6. Male graduate students in engineering fields in all institutions, by field: 1977–2009

Year	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal-lurgical/materials	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec
2007new ^a	101,204	3,916	760	2,627	4,283	5,318	11,335	33,149	1,397	10,930	15,733	3,841	185	959	831	5,940
2008	106,319	4,180	835	3,293	4,578	5,483	12,166	33,824	1,628	11,978	16,836	4,006	241	987	818	5,466
2009	111,359	4,532	866	3,807	4,925	5,572	13,337	34,044	1,690	12,025	18,253	4,274	257	1,045	981	5,751

na = not applicable; data were not collected at this level of detail. NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

nec = not elsewhere classified.

^aIn 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 7. Female graduate students in science, engineering, and health fields in all institutions, by field: 1977–2009

Year	All science, engineering, and health	Science and engineering			Health		
		Total	Science	Engineering	Total	Clinical medicine	Other health
1977	100,450	77,914	74,208	3,706	22,536	2,665	19,871
1978	NA	NA	NA	NA	NA	NA	NA
1979	116,739	89,277	83,390	5,887	27,462	4,019	23,443
1980	124,122	94,393	88,053	6,340	29,729	4,392	25,337
1981	131,572	99,845	92,098	7,747	31,727	4,474	27,253
1982	135,993	103,569	94,792	8,777	32,424	4,539	27,885
1983	139,504	106,503	96,694	9,809	33,001	4,632	28,369
1984	142,017	107,530	97,231	10,299	34,487	4,889	29,598
1985	145,805	110,621	99,538	11,083	35,184	5,285	29,899
1986	150,787	114,375	102,002	12,373	36,412	5,180	31,232
1987	153,556	117,167	104,196	12,971	36,389	5,253	31,136
1988	159,133	121,238	108,110	13,128	37,895	5,658	32,237
1989	165,753	125,872	112,264	13,608	39,881	5,945	33,936
1990	176,441	133,722	119,043	14,679	42,719	6,282	36,437
1991	186,315	140,830	125,132	15,698	45,485	6,716	38,769
1992	199,300	150,212	132,992	17,220	49,088	7,305	41,783
1993	209,828	156,538	138,850	17,688	53,290	8,180	45,110
1994	216,044	159,111	141,061	18,050	56,933	8,668	48,265
1995	220,335	160,210	142,197	18,013	60,125	9,095	51,030
1996	222,419	161,671	143,417	18,254	60,748	8,749	51,999
1997	222,711	162,011	143,291	18,720	60,700	8,807	51,893
1998	224,608	163,427	144,439	18,988	61,181	9,721	51,460
1999	230,581	168,396	148,509	19,887	62,185	10,201	51,984
2000	231,202	170,479	149,733	20,746	60,723	9,910	50,813
2001	238,452	177,419	155,162	22,257	61,033	10,588	50,445
2002	253,345	188,617	163,650	24,967	64,728	11,775	52,953
2003	268,439	198,397	170,810	27,587	70,042	12,823	57,219
2004	277,749	201,865	174,593	27,272	75,884	13,471	62,413
2005	286,935	206,308	179,413	26,895	80,627	14,075	66,552
2006	297,825	211,106	183,162	27,944	86,719	15,533	71,186
2007old ^a	299,671	218,295	188,321	29,974	81,376	16,306	65,070
2007new ^a	307,490	227,273	196,801	30,472	80,217	15,350	64,867
2008	311,179	231,997	200,460	31,537	79,182	16,347	62,835
2009	303,120	237,749	204,431	33,318	65,371	16,445	48,926

NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 8. Female graduate students in science fields in all institutions, by field: 1977–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
1977	74,208	2,141	16,674	ne	1,559	2,277	ne	4,119	ne	na	4,041	18,099	25,298
1978	NA	NA	NA	ne	NA	NA	ne	NA	ne	na	NA	NA	NA
1979	83,390	2,705	17,817	ne	2,323	2,885	ne	4,022	ne	na	4,495	20,342	28,801
1980	88,053	2,906	18,227	ne	3,087	3,207	ne	4,064	ne	na	4,596	21,583	30,383
1981	92,098	2,885	18,559	ne	4,209	3,416	ne	4,481	ne	na	5,011	22,766	30,771
1982	94,792	3,155	19,078	ne	5,446	3,723	ne	5,078	ne	na	5,419	23,097	29,796
1983	96,694	3,222	19,240	ne	6,614	3,895	ne	5,200	ne	na	5,883	24,257	28,383
1984	97,231	3,220	19,394	ne	6,873	3,872	ne	5,168	ne	na	6,159	24,751	27,794
1985	99,538	3,077	19,777	ne	7,561	3,925	ne	5,354	ne	na	6,509	25,124	28,211
1986	102,002	3,049	20,328	ne	7,852	3,945	ne	5,479	ne	na	6,864	25,864	28,621
1987	104,196	3,038	20,304	ne	8,015	3,776	ne	5,596	ne	na	7,117	26,929	29,421
1988	108,110	3,189	21,129	ne	8,194	3,800	ne	5,776	ne	na	7,502	28,461	30,059
1989	112,264	3,237	22,101	ne	7,988	3,854	ne	5,985	ne	na	7,805	29,855	31,439
1990	119,043	3,425	22,915	ne	8,199	4,117	ne	6,199	ne	na	8,070	32,345	33,773
1991	125,132	3,668	23,993	ne	8,290	4,451	ne	6,298	ne	na	8,568	34,787	35,077
1992	132,992	3,908	25,296	ne	8,471	4,846	ne	6,549	ne	na	8,849	36,834	38,239
1993	138,850	4,247	26,869	ne	8,431	5,026	ne	6,638	ne	na	9,206	37,990	40,443
1994	141,061	4,451	28,006	ne	8,087	5,319	ne	6,531	ne	na	9,167	38,138	41,362
1995	142,197	4,599	28,715	ne	8,133	5,434	ne	6,258	ne	na	9,085	37,764	42,209
1996	143,417	4,585	28,642	ne	8,797	5,447	ne	6,219	ne	na	9,045	37,747	42,935
1997	143,291	4,706	28,476	ne	9,881	5,416	ne	5,868	ne	na	8,848	37,619	42,477
1998	144,439	4,852	28,953	ne	10,802	5,568	ne	5,988	ne	na	8,753	37,462	42,061
1999	148,509	5,049	29,621	ne	12,545	5,725	ne	6,043	ne	na	8,915	37,271	43,340
2000	149,733	5,088	29,807	ne	14,080	5,753	ne	5,780	ne	na	9,115	36,872	43,238
2001	155,162	5,343	31,049	ne	15,302	5,892	ne	6,270	ne	na	9,336	37,307	44,663
2002	163,650	5,653	33,411	ne	16,025	6,247	ne	6,886	ne	na	10,066	37,717	47,645
2003	170,810	6,026	35,883	ne	14,816	6,538	ne	7,289	ne	na	10,778	38,779	50,701
2004	174,593	6,258	37,289	ne	13,277	6,932	ne	7,497	ne	na	11,300	40,156	51,884
2005	179,413	6,202	38,521	ne	12,045	6,895	ne	7,437	ne	na	11,726	43,319	53,268
2006	183,162	6,299	39,369	ne	12,062	7,004	ne	7,693	ne	na	12,005	43,703	55,027
2007old ^a	188,321	6,444	40,651	ne	12,206	6,951	ne	7,781	ne	na	12,253	45,594	56,441

TABLE 8. Female graduate students in science fields in all institutions, by field: 1977–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
2007new ^a	196,801	6,627	40,754	4,647	12,017	6,650	2,327	7,678	2,560	863	12,109	45,116	55,453
2008	200,460	6,891	41,334	5,381	12,545	6,621	2,958	7,751	3,234	1,097	12,333	44,615	55,700
2009	204,431	7,485	41,818	6,029	13,053	6,815	3,203	7,979	3,809	1,264	12,691	42,536	57,749

na = not applicable; data were not collected at this level of detail. NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

ne = not eligible; data were not collected for this field prior to 2007.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 9. Female graduate students in engineering fields in all institutions, by field: 1977–2009

Year	Aerospace	Agricultural		Biomedical	Chemical	Civil	Electrical	Engineering	Industrial	Mechanical	Metal-					
	Total	engineering	engineering	Architecture ^a	engineering	engineering ^a	engineering	science	engineering	engineering	engineering	lurgical/	Mining	Nuclear	Petroleum	Engineering,
1977	3,706	33	29	na	83	380	828	710	87	755	273	184	18	57	14	255
1978	NA	NA	NA	na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	5,887	49	33	na	131	625	1,319	933	141	1,256	469	289	26	85	31	500
1980	6,340	74	32	na	165	680	1,365	983	151	1,355	534	305	28	81	41	546
1981	7,747	67	45	na	179	779	1,574	1,276	201	1,543	631	394	39	84	52	883
1982	8,777	110	59	na	218	903	1,749	1,551	266	1,619	719	425	40	86	42	990
1983	9,809	123	77	na	269	1,018	1,859	2,068	290	1,518	805	452	47	84	72	1,127
1984	10,299	132	87	na	286	974	2,027	2,213	292	1,608	956	472	44	88	60	1,060
1985	11,083	163	82	na	287	1,007	2,147	2,435	240	1,782	1,011	607	30	107	66	1,119
1986	12,373	200	86	na	344	1,047	2,147	2,908	297	2,097	1,159	684	36	123	48	1,197
1987	12,971	224	100	na	394	1,162	2,103	3,098	287	2,268	1,296	738	40	128	54	1,079
1988	13,128	227	94	na	434	1,079	2,294	3,278	267	2,126	1,402	763	48	127	49	940
1989	13,608	243	93	na	468	1,037	2,435	3,515	248	2,153	1,398	815	46	141	28	988
1990	14,679	289	106	na	542	1,153	2,689	3,715	299	2,188	1,442	898	58	155	33	1,112
1991	15,698	327	133	na	580	1,260	3,102	3,851	288	2,402	1,511	995	50	177	52	970
1992	17,220	348	154	na	607	1,397	3,654	4,277	305	2,708	1,698	1,074	43	186	65	704
1993	17,688	357	162	na	687	1,504	3,858	4,313	304	2,645	1,774	1,037	50	185	66	746
1994	18,050	358	211	na	686	1,529	4,211	4,109	306	2,857	1,823	1,083	50	153	59	615
1995	18,013	351	214	na	714	1,567	4,232	4,154	297	2,823	1,677	1,074	42	145	71	652
1996	18,254	352	227	na	716	1,651	4,300	4,229	295	2,769	1,636	1,077	54	153	60	735
1997	18,720	371	236	na	808	1,720	4,164	4,550	278	2,656	1,779	1,117	63	143	77	758
1998	18,988	382	260	na	853	1,727	4,102	4,872	331	2,452	1,762	1,130	55	134	55	873
1999	19,887	423	269	na	986	1,733	4,157	5,133	319	2,659	1,788	1,084	55	144	82	1,055
2000	20,746	469	282	na	1,056	1,875	4,277	5,536	342	2,713	1,832	1,041	46	156	87	1,034
2001	22,257	485	300	na	1,238	1,829	4,503	6,212	363	2,808	1,944	1,173	36	157	91	1,118
2002	24,967	516	288	na	1,513	1,995	4,905	7,270	430	3,076	2,083	1,251	37	148	107	1,348
2003	27,587	603	315	na	1,944	2,100	5,398	7,794	465	3,266	2,354	1,331	42	182	129	1,664
2004	27,272	600	311	na	2,183	2,106	5,441	7,201	465	3,230	2,456	1,321	42	196	134	1,586
2005	26,895	607	323	na	2,297	2,079	5,405	6,788	419	3,296	2,408	1,348	39	211	121	1,554
2006	27,944	709	350	na	2,486	2,159	5,423	7,026	451	3,466	2,485	1,390	43	214	135	1,607
2007old ^a	29,974	700	366	na	2,610	2,235	6,348	7,367	412	3,520	2,615	1,460	51	226	183	1,881

TABLE 9. Female graduate students in engineering fields in all institutions, by field: 1977–2009

Year	Aerospace Total	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal- lurgical/ materials	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec	
2007new ^a	30,472	700	366	1,974	2,621	2,266	4,736	7,439	409	3,544	2,614	1,473	37	221	183	1,889
2008	31,537	722	398	2,612	2,761	2,409	4,765	7,340	471	3,714	2,749	1,533	49	214	191	1,609
2009	33,318	734	437	2,997	2,979	2,616	5,301	7,174	478	3,800	2,990	1,589	55	198	209	1,761

na = not applicable; data were not collected at this level of detail. NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 10. Full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975–2009

Year	All science, engineering, and health	Science and engineering			Health		
		Total	Science	Engineering	Total	Clinical medicine	Other health
1975	219,648	202,260	164,437	37,823	17,388	4,560	12,828
1976	223,412	204,815	167,867	36,948	18,597	4,573	14,024
1977	226,738	206,411	169,184	37,227	20,327	4,345	15,982
1978 ^a	223,030	201,737	164,151	37,586	21,293	5,029	16,264
1979	231,760	209,000	168,959	40,041	22,760	5,527	17,233
1980	238,416	214,417	171,767	42,650	23,999	5,774	18,225
1981	242,049	217,952	172,200	45,752	24,097	5,622	18,475
1982	244,757	221,874	172,090	49,784	22,883	5,283	17,600
1983	252,017	229,404	175,472	53,932	22,613	5,318	17,295
1984	253,922	230,957	175,766	55,191	22,965	5,263	17,702
1985	257,287	233,938	178,020	55,918	23,349	5,525	17,824
1986	266,168	242,729	182,532	60,197	23,439	5,554	17,885
1987	271,056	247,105	185,143	61,962	23,951	5,833	18,118
1988	275,127	250,557	187,525	63,032	24,570	6,198	18,372
1989	282,648	256,820	192,424	64,396	25,828	6,433	19,395
1990	292,782	265,323	199,313	66,010	27,459	6,901	20,558
1991	307,010	277,070	206,036	71,034	29,940	7,223	22,717
1992	322,555	290,408	215,965	74,443	32,147	7,953	24,194
1993	329,644	293,905	220,097	73,808	35,739	8,833	26,906
1994	332,088	292,979	221,409	71,570	39,109	9,226	29,883
1995	329,283	287,171	219,389	67,782	42,112	9,777	32,335
1996	328,536	284,039	218,180	65,859	44,497	9,803	34,694
1997	327,289	280,669	214,981	65,688	46,620	10,212	36,408
1998	327,389	278,943	213,508	65,435	48,446	10,944	37,502
1999	334,423	283,893	215,870	68,023	50,530	11,554	38,976
2000	341,283	291,355	219,079	72,276	49,928	11,029	38,899
2001	354,522	304,021	226,573	77,448	50,501	11,822	38,679
2002	378,991	325,472	240,020	85,452	53,519	13,334	40,185
2003	397,420	339,028	248,812	90,216	58,392	14,742	43,650
2004	402,573	340,529	253,574	86,955	62,044	14,999	47,045
2005	406,620	341,742	257,283	84,459	64,878	15,102	49,776
2006	419,015	349,802	261,984	87,818	69,213	16,567	52,646
2007old ^b	430,860	362,976	269,821	93,155	67,884	17,451	50,433
2007new ^b	437,365	371,542	277,229	94,313	65,823	15,478	50,345
2008	449,613	383,560	285,305	98,255	66,053	16,965	49,088
2009	456,115	398,498	293,561	104,937	57,617	16,725	40,892

^a Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.^b In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 11. Full-time graduate students in science fields in all institutions, by field: 1975–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
1975	164,437	8,970	36,692	ne	4,473	9,557	ne	10,694	ne	na	21,916	24,105	48,030
1976	167,867	9,548	37,681	ne	4,748	10,082	ne	10,952	ne	na	22,261	25,643	46,952
1977	169,184	9,820	38,194	ne	4,604	10,415	ne	10,365	ne	na	22,514	25,703	47,569
1978 ^b	164,151	9,815	37,572	ne	4,930	10,361	ne	9,769	ne	na	22,143	24,754	44,807
1979	168,959	10,053	37,773	ne	5,853	10,619	ne	9,667	ne	na	22,541	25,848	46,605
1980	171,767	10,349	37,422	ne	6,587	10,871	ne	9,901	ne	na	22,917	26,671	47,049
1981	172,200	10,480	37,022	ne	7,445	10,931	ne	10,152	ne	na	23,310	26,570	46,290
1982	172,090	10,325	36,415	ne	9,171	11,317	ne	10,813	ne	na	24,040	25,667	44,342
1983	175,472	10,230	36,405	ne	10,600	11,961	ne	10,955	ne	na	25,211	26,561	43,549
1984	175,766	10,170	36,759	ne	11,436	11,732	ne	11,309	ne	na	25,854	25,969	42,537
1985	178,020	9,490	36,677	ne	13,861	11,331	ne	11,816	ne	na	26,672	25,335	42,838
1986	182,532	9,596	37,435	ne	15,020	11,241	ne	12,388	ne	na	27,770	26,255	42,827
1987	185,143	9,316	37,885	ne	15,336	10,424	ne	13,043	ne	na	28,423	27,256	43,460
1988	187,525	9,372	38,840	ne	15,133	10,181	ne	13,512	ne	na	28,585	28,118	43,784
1989	192,424	9,293	40,019	ne	15,606	10,012	ne	13,681	ne	na	29,216	29,348	45,249
1990	199,313	9,288	40,648	ne	16,689	10,239	ne	13,865	ne	na	29,490	30,618	48,476
1991	206,036	9,472	42,385	ne	16,546	10,364	ne	14,256	ne	na	30,126	32,258	50,629
1992	215,965	9,672	44,040	ne	17,505	10,976	ne	14,679	ne	na	30,681	34,162	54,250
1993	220,097	9,712	46,101	ne	17,401	11,346	ne	14,530	ne	na	30,616	34,782	55,609
1994	221,409	9,746	47,694	ne	16,701	11,446	ne	14,226	ne	na	30,049	35,288	56,259
1995	219,389	9,835	48,055	ne	16,510	11,259	ne	13,410	ne	na	28,879	35,222	56,219
1996	218,180	9,527	47,454	ne	17,195	10,795	ne	12,966	ne	na	27,931	35,412	56,900
1997	214,981	9,362	46,657	ne	18,335	10,510	ne	12,144	ne	na	26,882	35,551	55,540
1998	213,508	9,199	46,779	ne	19,972	10,444	ne	11,751	ne	na	26,391	35,148	53,824
1999	215,870	9,371	46,946	ne	22,687	10,484	ne	11,796	ne	na	26,635	34,658	53,293
2000	219,079	9,357	46,787	ne	26,558	10,558	ne	11,740	ne	na	26,492	34,919	52,668
2001	226,573	9,405	48,138	ne	30,087	10,504	ne	12,467	ne	na	27,179	34,487	54,306
2002	240,020	9,685	51,551	ne	32,579	11,116	ne	13,709	ne	na	28,619	34,707	58,054
2003	248,812	10,003	54,350	ne	30,708	11,497	ne	14,627	ne	na	30,441	35,774	61,412
2004	253,574	10,040	55,848	ne	29,162	11,685	ne	14,916	ne	na	31,675	37,872	62,376
2005	257,283	9,710	57,697	ne	28,317	11,370	ne	15,261	ne	na	32,400	38,919	63,609
2006	261,984	9,478	58,918	ne	28,760	11,431	ne	15,571	ne	na	32,841	38,994	65,991
2007old ^a	269,821	9,634	60,093	ne	30,511	11,376	ne	15,966	ne	na	33,091	41,166	67,984

TABLE 11. Full-time graduate students in science fields in all institutions, by field: 1975–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
2007new ^a	277,229	9,822	60,428	4,528	30,082	10,892	1,594	15,668	2,398	1,530	32,857	40,678	66,752
2008	285,305	10,132	60,662	5,224	31,338	11,171	1,936	16,241	3,110	1,909	33,254	42,103	68,225
2009	293,561	10,823	61,466	6,091	32,198	11,589	2,168	16,885	3,957	2,261	34,181	40,373	71,569

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

^b Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 12. Full-time graduate students in engineering fields in all institutions, by field: 1975–2009

Year	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal-lurgical/materials	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec
1975	37,823	1,245	540	na	758	3,576	7,363	8,278	1,156	4,152	4,931	1,808	344	1,261	228	2,183
1976	36,948	1,165	567	na	719	3,757	7,025	8,147	1,140	3,578	4,919	1,879	411	1,222	323	2,096
1977	37,227	1,187	650	na	685	3,944	7,094	8,528	1,120	3,343	4,883	1,976	365	1,159	301	1,992
1978 ^b	37,586	1,140	650	na	719	4,019	7,335	8,509	1,180	3,249	4,950	1,995	333	1,130	329	2,048
1979	40,041	1,152	677	na	814	4,292	7,623	9,039	1,061	3,743	5,428	2,157	298	1,075	337	2,345
1980	42,650	1,327	661	na	775	4,513	7,958	9,963	1,148	3,736	5,841	2,274	325	1,043	373	2,713
1981	45,752	1,483	702	na	837	5,016	8,799	10,450	1,220	3,603	6,422	2,478	389	1,032	393	2,928
1982	49,784	1,522	762	na	913	5,637	9,381	11,533	1,277	3,807	7,267	2,505	373	1,042	476	3,289
1983	53,932	1,840	788	na	1,016	5,893	9,804	13,265	1,356	3,288	8,330	2,731	428	1,052	620	3,521
1984	55,191	1,854	800	na	1,097	5,758	10,086	13,925	1,272	3,393	8,698	2,888	424	1,018	614	3,364
1985	55,918	1,994	800	na	1,100	5,568	9,749	14,799	1,264	3,456	8,875	3,109	391	1,030	577	3,206
1986	60,197	2,154	935	na	1,242	5,625	9,971	16,290	1,445	3,810	9,789	3,398	442	1,059	572	3,465
1987	61,962	2,372	981	na	1,337	5,704	9,628	17,101	1,373	4,165	10,230	3,467	435	1,044	644	3,481
1988	63,032	2,533	923	na	1,415	5,384	9,946	17,706	1,418	4,313	10,416	3,509	415	1,105	599	3,350
1989	64,396	2,772	892	na	1,579	5,303	9,964	18,466	1,259	4,684	10,492	3,760	338	1,112	506	3,269
1990	66,010	3,010	826	na	1,771	5,476	10,128	18,675	1,252	4,806	10,867	3,969	334	1,080	484	3,332
1991	71,034	3,325	860	na	1,888	5,818	11,328	19,874	1,364	5,639	11,687	4,094	336	1,080	515	3,226
1992	74,443	3,306	880	na	2,127	5,982	12,454	20,977	1,415	6,113	12,383	4,309	300	1,084	572	2,541
1993	73,808	3,262	867	na	2,237	6,079	12,458	20,343	1,397	5,950	12,395	4,294	311	1,070	579	2,566
1994	71,570	3,000	908	na	2,263	6,136	12,641	19,408	1,347	5,960	11,875	4,143	297	997	522	2,073
1995	67,782	2,693	890	na	2,284	5,985	12,248	18,254	1,243	5,389	11,128	3,912	270	883	460	2,143
1996	65,859	2,576	836	na	2,279	5,939	11,791	18,107	1,057	5,166	10,690	3,724	275	771	442	2,206
1997	65,688	2,529	791	na	2,419	5,821	11,406	18,999	1,018	5,116	10,432	3,694	269	708	461	2,025
1998	65,435	2,565	796	na	2,473	5,630	11,154	19,608	1,114	4,894	10,073	3,736	226	662	481	2,023
1999	68,023	2,645	797	na	2,712	5,593	11,237	20,521	1,035	5,500	10,331	3,563	258	641	535	2,655
2000	72,276	2,759	741	na	2,839	5,861	11,754	22,962	1,098	6,049	10,795	3,601	191	660	519	2,447
2001	77,448	2,821	790	na	3,157	5,829	12,102	25,240	1,218	6,534	11,436	3,977	194	651	538	2,961
2002	85,452	3,003	796	na	3,855	6,279	12,981	28,240	1,441	7,200	12,512	4,242	207	655	649	3,392
2003	90,216	3,243	900	na	4,717	6,414	13,710	28,929	1,770	7,098	13,356	4,386	219	752	684	4,038
2004	86,955	3,243	842	na	5,047	6,379	13,588	26,732	1,741	6,591	12,718	4,359	238	809	660	4,008
2005	84,459	3,241	855	na	5,254	6,139	13,196	25,849	1,613	6,113	12,178	4,507	212	840	631	3,831
2006	87,818	3,374	893	na	5,666	6,218	13,074	27,379	1,656	6,421	12,666	4,627	181	910	647	4,106
2007old ^a	93,155	3,482	917	na	5,898	6,275	14,691	28,934	1,454	7,036	13,170	4,667	209	960	792	4,670

TABLE 12. Full-time graduate students in engineering fields in all institutions, by field: 1975–2009

Year	Aerospace Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal- lurgical/ materials	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec
2007new ^a	94,313	3,482	917	4,097	5,921	6,459	11,336	29,076	1,432	7,422	13,160	4,613	142	951	792	4,513
2008	98,255	3,691	1,022	5,211	6,262	6,762	11,909	29,212	1,486	8,216	13,763	4,811	207	941	828	3,934
2009	104,937	3,974	1,084	6,112	6,859	7,110	13,503	29,282	1,490	8,362	15,609	5,181	212	968	993	4,198

na = not applicable; data were not collected at this level of detail.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

^b Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 13. Male full-time graduate students in science, engineering, and health fields in all institutions, by field: 1977–2009

Year	All science, engineering, and health	Science and engineering			Health		
		Total	Science	Engineering	Total	Clinical medicine	Other health
1977	161,885	154,365	119,401	34,964	7,520	2,562	4,958
1978	NA	NA	NA	NA	NA	NA	NA
1979	159,575	151,945	115,345	36,600	7,630	2,871	4,759
1980	160,859	153,101	114,306	38,795	7,758	2,968	4,790
1981	161,476	154,034	112,896	41,138	7,442	2,850	4,592
1982	163,273	156,369	111,834	44,535	6,904	2,602	4,302
1983	168,215	161,506	113,195	48,311	6,709	2,602	4,107
1984	169,074	162,368	113,226	49,142	6,706	2,424	4,282
1985	170,945	164,162	114,528	49,634	6,783	2,494	4,289
1986	176,576	169,812	116,593	53,219	6,764	2,613	4,151
1987	179,430	172,077	117,406	54,671	7,353	2,905	4,448
1988	179,555	172,280	116,871	55,409	7,275	2,965	4,310
1989	182,785	175,047	118,795	56,252	7,738	2,958	4,780
1990	186,719	178,645	121,340	57,305	8,074	3,230	4,844
1991	193,539	185,020	123,664	61,356	8,519	3,339	5,180
1992	200,818	191,722	127,940	63,782	9,096	3,577	5,519
1993	200,778	190,785	128,174	62,611	9,993	3,976	6,017
1994	197,425	186,623	126,631	59,992	10,802	4,147	6,655
1995	191,200	179,770	123,490	56,280	11,430	4,231	7,199
1996	187,116	174,689	120,657	54,032	12,427	4,377	8,050
1997	183,392	170,168	116,988	53,180	13,224	4,588	8,636
1998	180,993	167,320	114,712	52,608	13,673	4,761	8,912
1999	182,940	169,055	114,555	54,500	13,885	4,835	9,050
2000	186,261	172,783	115,359	57,424	13,478	4,520	8,958
2001	193,465	179,863	118,608	61,255	13,602	4,784	8,818
2002	206,152	191,809	124,774	67,035	14,343	5,329	9,014
2003	214,041	198,485	128,345	70,140	15,556	5,722	9,834
2004	212,830	196,821	129,685	67,136	16,009	5,556	10,453
2005	211,845	195,664	130,677	64,987	16,181	5,378	10,803
2006	216,816	199,651	132,515	67,136	17,165	5,807	11,358
2007old ^a	224,012	206,880	135,892	70,988	17,132	6,211	10,921
2007new ^a	226,198	209,997	138,285	71,712	16,201	5,309	10,892
2008	232,451	216,454	141,825	74,629	15,997	5,465	10,532
2009	240,564	226,008	146,490	79,518	14,556	5,388	9,168

NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 14. Male full-time graduate students in science fields in all institutions, by field: 1977–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
1977	119,401	7,983	25,688	ne	3,845	8,634	ne	8,083	ne	na	19,300	13,949	31,919
1978	NA	NA	NA	ne	NA	NA	ne	NA	ne	na	NA	NA	NA
1979	115,345	7,812	24,314	ne	4,803	8,400	ne	7,497	ne	na	19,048	13,277	30,194
1980	114,306	7,920	23,600	ne	5,184	8,388	ne	7,595	ne	na	19,214	12,779	29,626
1981	112,896	8,007	22,997	ne	5,718	8,360	ne	7,612	ne	na	19,307	12,007	28,888
1982	111,834	7,724	21,949	ne	6,860	8,530	ne	8,022	ne	na	19,643	11,223	27,883
1983	113,195	7,637	21,717	ne	7,961	8,992	ne	8,037	ne	na	20,374	11,361	27,116
1984	113,226	7,526	21,759	ne	8,693	8,875	ne	8,328	ne	na	20,756	10,714	26,575
1985	114,528	7,026	21,570	ne	10,806	8,498	ne	8,614	ne	na	21,243	10,232	26,539
1986	116,593	7,136	21,730	ne	11,703	8,329	ne	8,984	ne	na	22,029	10,263	26,419
1987	117,406	6,877	21,853	ne	12,005	7,750	ne	9,481	ne	na	22,393	10,422	26,625
1988	116,871	6,819	22,143	ne	11,795	7,438	ne	9,794	ne	na	22,214	10,199	26,469
1989	118,795	6,708	22,514	ne	12,355	7,263	ne	9,746	ne	na	22,552	10,467	27,190
1990	121,340	6,572	22,595	ne	13,218	7,313	ne	9,821	ne	na	22,668	10,642	28,511
1991	123,664	6,537	23,287	ne	13,057	7,190	ne	10,035	ne	na	22,852	10,957	29,749
1992	127,940	6,573	24,012	ne	13,949	7,585	ne	10,250	ne	na	23,176	11,171	31,224
1993	128,174	6,429	24,678	ne	13,811	7,799	ne	10,096	ne	na	22,891	11,189	31,281
1994	126,631	6,319	25,276	ne	13,152	7,659	ne	9,810	ne	na	22,281	11,131	31,003
1995	123,490	6,275	25,123	ne	12,860	7,379	ne	9,213	ne	na	21,222	10,903	30,515
1996	120,657	5,971	24,554	ne	13,102	6,941	ne	8,797	ne	na	20,395	10,775	30,122
1997	116,988	5,734	23,819	ne	13,536	6,650	ne	8,171	ne	na	19,454	10,833	28,791
1998	114,712	5,507	23,487	ne	14,520	6,374	ne	7,797	ne	na	19,034	10,509	27,484
1999	114,555	5,486	23,097	ne	16,313	6,171	ne	7,662	ne	na	19,065	10,073	26,688
2000	115,359	5,298	22,604	ne	19,098	6,119	ne	7,669	ne	na	18,750	9,841	25,980
2001	118,608	5,201	22,707	ne	21,776	5,936	ne	8,085	ne	na	19,093	9,303	26,507
2002	124,774	5,253	23,819	ne	23,743	6,194	ne	8,807	ne	na	19,816	9,303	27,839
2003	128,345	5,360	24,684	ne	22,858	6,314	ne	9,488	ne	na	21,014	9,414	29,213
2004	129,685	5,304	24,950	ne	21,962	6,329	ne	9,728	ne	na	21,790	9,989	29,633
2005	130,677	5,011	25,598	ne	21,689	6,106	ne	10,081	ne	na	22,060	9,866	30,266
2006	132,515	4,828	26,203	ne	21,953	6,037	ne	10,244	ne	na	22,328	9,823	31,099
2007 old ^a	135,892	4,895	26,464	ne	23,152	5,953	ne	10,548	ne	na	22,309	10,388	32,183

TABLE 14. Male full-time graduate students in science fields in all institutions, by field: 1977–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
2007new ^a	138,285	4,969	26,639	1,679	22,843	5,719	271	10,334	1,078	693	22,188	10,243	31,629
2008	141,825	5,129	26,638	1,949	23,746	5,978	325	10,732	1,335	868	22,378	10,509	32,238
2009	146,490	5,429	26,948	2,243	24,232	6,227	354	11,191	1,686	1,045	22,970	10,177	33,988

na = not applicable; data were not collected at this level of detail. NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex. ne = not eligible; data were not collected for this field prior to 2007.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 15. Male full-time graduate students in engineering fields in all institutions, by field: 1977–2009

Year	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal-lurgical/materials	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec
1977	34,964	1,160	623	na	617	3,660	6,553	8,146	1,061	2,967	4,742	1,833	348	1,113	290	1,851
1978	NA	NA	NA	na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	36,600	1,116	648	na	704	3,852	6,729	8,585	986	3,164	5,170	1,943	274	1,000	308	2,121
1980	38,795	1,273	630	na	644	4,047	7,059	9,405	1,056	3,071	5,525	2,041	298	970	346	2,430
1981	41,138	1,432	658	na	688	4,482	7,673	9,739	1,114	2,915	6,075	2,187	352	960	359	2,504
1982	44,535	1,449	711	na	733	4,963	8,140	10,715	1,154	3,042	6,834	2,192	338	969	443	2,852
1983	48,311	1,760	727	na	789	5,122	8,509	12,302	1,221	2,673	7,847	2,403	387	978	557	3,036
1984	49,142	1,768	730	na	853	5,024	8,648	12,775	1,127	2,769	8,137	2,530	383	948	562	2,888
1985	49,634	1,868	740	na	857	4,811	8,257	13,591	1,146	2,821	8,316	2,666	363	939	530	2,729
1986	53,219	2,006	873	na	945	4,829	8,484	14,823	1,293	3,076	9,162	2,868	407	960	534	2,959
1987	54,671	2,205	892	na	994	4,822	8,230	15,552	1,246	3,430	9,498	2,889	400	940	601	2,972
1988	55,409	2,365	845	na	1,044	4,588	8,381	16,024	1,290	3,572	9,581	2,923	373	1,004	568	2,851
1989	56,252	2,592	818	na	1,189	4,499	8,315	16,644	1,120	3,772	9,637	3,116	298	993	486	2,773
1990	57,305	2,811	739	na	1,316	4,573	8,347	16,719	1,075	3,893	10,019	3,273	287	952	460	2,841
1991	61,356	3,071	744	na	1,393	4,830	9,309	17,717	1,182	4,591	10,745	3,345	304	935	477	2,713
1992	63,782	3,043	746	na	1,608	4,882	10,126	18,557	1,230	4,931	11,297	3,497	275	935	521	2,134
1993	62,611	2,971	730	na	1,664	4,908	9,934	17,906	1,195	4,770	11,210	3,482	274	926	524	2,117
1994	59,992	2,722	722	na	1,685	4,940	9,855	17,014	1,145	4,651	10,658	3,289	262	880	473	1,696
1995	56,280	2,417	700	na	1,668	4,756	9,431	15,768	1,061	4,229	9,993	3,082	237	776	408	1,754
1996	54,032	2,293	642	na	1,655	4,615	8,937	15,497	883	4,069	9,500	2,893	227	649	393	1,779
1997	53,180	2,226	588	na	1,705	4,451	8,495	16,102	843	4,009	9,143	2,819	218	586	392	1,603
1998	52,608	2,251	573	na	1,720	4,233	8,213	16,471	892	3,810	8,840	2,829	181	551	433	1,611
1999	54,500	2,320	564	na	1,822	4,197	8,192	17,147	838	4,364	9,069	2,715	215	530	462	2,065
2000	57,424	2,385	500	na	1,897	4,315	8,454	19,073	879	4,710	9,451	2,751	156	535	447	1,871
2001	61,255	2,435	530	na	2,070	4,289	8,677	20,767	961	5,105	9,998	2,988	163	523	460	2,289
2002	67,035	2,591	551	na	2,477	4,613	9,201	22,884	1,137	5,628	10,932	3,180	177	527	554	2,583
2003	70,140	2,790	621	na	2,959	4,604	9,592	23,361	1,406	5,467	11,608	3,258	187	598	568	3,121
2004	67,136	2,789	577	na	3,135	4,562	9,427	21,645	1,363	4,996	10,947	3,218	208	641	540	3,088
2005	64,987	2,779	583	na	3,229	4,363	9,074	21,090	1,261	4,508	10,446	3,319	183	670	527	2,955
2006	67,136	2,849	591	na	3,456	4,366	8,905	22,156	1,273	4,679	10,876	3,415	148	733	541	3,148
2007old ^a	70,988	2,980	603	na	3,619	4,345	9,831	23,458	1,116	5,195	11,256	3,415	173	781	646	3,570

TABLE 15. Male full-time graduate students in engineering fields in all institutions, by field: 1977–2009

Year	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal-lurgical/materials	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec
2007new ^a	71,712	2,980	603	2,341	3,631	4,500	7,898	23,579	1,095	5,491	11,247	3,352	118	773	646	3,458
2008	74,629	3,156	675	2,909	3,888	4,671	8,372	23,787	1,135	6,205	11,763	3,474	170	782	677	2,965
2009	79,518	3,432	717	3,433	4,268	4,792	9,499	23,918	1,151	6,252	13,326	3,766	170	816	820	3,158

na = not applicable; data were not collected at this level of detail. NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 16. Female full-time graduate students in science, engineering, and health fields in all institutions, by field: 1977–2009

Year	All science, engineering, and health	Science and engineering			Health		
		Total	Science	Engineering	Total	Clinical medicine	Other health
1977	64,853	52,046	49,783	2,263	12,807	1,783	11,024
1978	NA	NA	NA	NA	NA	NA	NA
1979	72,185	57,055	53,614	3,441	15,130	2,656	12,474
1980	77,557	61,316	57,461	3,855	16,241	2,806	13,435
1981	80,573	63,918	59,304	4,614	16,655	2,772	13,883
1982	81,484	65,505	60,256	5,249	15,979	2,681	13,298
1983	83,802	67,898	62,277	5,621	15,904	2,716	13,188
1984	84,848	68,589	62,540	6,049	16,259	2,839	13,420
1985	86,342	69,776	63,492	6,284	16,566	3,031	13,535
1986	89,592	72,917	65,939	6,978	16,675	2,941	13,734
1987	91,626	75,028	67,737	7,291	16,598	2,928	13,670
1988	95,572	78,277	70,654	7,623	17,295	3,233	14,062
1989	99,863	81,773	73,629	8,144	18,090	3,475	14,615
1990	106,063	86,678	77,973	8,705	19,385	3,671	15,714
1991	113,471	92,050	82,372	9,678	21,421	3,884	17,537
1992	121,737	98,686	88,025	10,661	23,051	4,376	18,675
1993	128,866	103,120	91,923	11,197	25,746	4,857	20,889
1994	134,663	106,356	94,778	11,578	28,307	5,079	23,228
1995	138,083	107,401	95,899	11,502	30,682	5,546	25,136
1996	141,420	109,350	97,523	11,827	32,070	5,426	26,644
1997	143,897	110,501	97,993	12,508	33,396	5,624	27,772
1998	146,396	111,623	98,796	12,827	34,773	6,183	28,590
1999	151,483	114,838	101,315	13,523	36,645	6,719	29,926
2000	155,022	118,572	103,720	14,852	36,450	6,509	29,941
2001	161,057	124,158	107,965	16,193	36,899	7,038	29,861
2002	172,839	133,663	115,246	18,417	39,176	8,005	31,171
2003	183,379	140,543	120,467	20,076	42,836	9,020	33,816
2004	189,743	143,708	123,889	19,819	46,035	9,443	36,592
2005	194,775	146,078	126,606	19,472	48,697	9,724	38,973
2006	202,199	150,151	129,469	20,682	52,048	10,760	41,288
2007old ^a	206,848	156,096	133,929	22,167	50,752	11,240	39,512
2007new ^a	211,167	161,545	138,944	22,601	49,622	10,169	39,453
2008	217,162	167,106	143,480	23,626	50,056	11,500	38,556
2009	215,551	172,490	147,071	25,419	43,061	11,337	31,724

NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 17. Female full-time graduate students in science fields in all institutions, by field: 1977–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
1977	49,783	1,837	12,506	ne	759	1,781	ne	2,282	ne	na	3,214	11,754	15,650
1978	NA	NA	NA	ne	NA	NA	ne	NA	ne	na	NA	NA	NA
1979	53,614	2,241	13,459	ne	1,050	2,219	ne	2,170	ne	na	3,493	12,571	16,411
1980	57,461	2,429	13,822	ne	1,403	2,483	ne	2,306	ne	na	3,703	13,892	17,423
1981	59,304	2,473	14,025	ne	1,727	2,571	ne	2,540	ne	na	4,003	14,563	17,402
1982	60,256	2,601	14,466	ne	2,311	2,787	ne	2,791	ne	na	4,397	14,444	16,459
1983	62,277	2,593	14,688	ne	2,639	2,969	ne	2,918	ne	na	4,837	15,200	16,433
1984	62,540	2,644	15,000	ne	2,743	2,857	ne	2,981	ne	na	5,098	15,255	15,962
1985	63,492	2,464	15,107	ne	3,055	2,833	ne	3,202	ne	na	5,429	15,103	16,299
1986	65,939	2,460	15,705	ne	3,317	2,912	ne	3,404	ne	na	5,741	15,992	16,408
1987	67,737	2,439	16,032	ne	3,331	2,674	ne	3,562	ne	na	6,030	16,834	16,835
1988	70,654	2,553	16,697	ne	3,338	2,743	ne	3,718	ne	na	6,371	17,919	17,315
1989	73,629	2,585	17,505	ne	3,251	2,749	ne	3,935	ne	na	6,664	18,881	18,059
1990	77,973	2,716	18,053	ne	3,471	2,926	ne	4,044	ne	na	6,822	19,976	19,965
1991	82,372	2,935	19,098	ne	3,489	3,174	ne	4,221	ne	na	7,274	21,301	20,880
1992	88,025	3,099	20,028	ne	3,556	3,391	ne	4,429	ne	na	7,505	22,991	23,026
1993	91,923	3,283	21,423	ne	3,590	3,547	ne	4,434	ne	na	7,725	23,593	24,328
1994	94,778	3,427	22,418	ne	3,549	3,787	ne	4,416	ne	na	7,768	24,157	25,256
1995	95,899	3,560	22,932	ne	3,650	3,880	ne	4,197	ne	na	7,657	24,319	25,704
1996	97,523	3,556	22,900	ne	4,093	3,854	ne	4,169	ne	na	7,536	24,637	26,778
1997	97,993	3,628	22,838	ne	4,799	3,860	ne	3,973	ne	na	7,428	24,718	26,749
1998	98,796	3,692	23,292	ne	5,452	4,070	ne	3,954	ne	na	7,357	24,639	26,340
1999	101,315	3,885	23,849	ne	6,374	4,313	ne	4,134	ne	na	7,570	24,585	26,605
2000	103,720	4,059	24,183	ne	7,460	4,439	ne	4,071	ne	na	7,742	25,078	26,688
2001	107,965	4,204	25,431	ne	8,311	4,568	ne	4,382	ne	na	8,086	25,184	27,799
2002	115,246	4,432	27,732	ne	8,836	4,922	ne	4,902	ne	na	8,803	25,404	30,215
2003	120,467	4,643	29,666	ne	7,850	5,183	ne	5,139	ne	na	9,427	26,360	32,199
2004	123,889	4,736	30,898	ne	7,200	5,356	ne	5,188	ne	na	9,885	27,883	32,743
2005	126,606	4,699	32,099	ne	6,628	5,264	ne	5,180	ne	na	10,340	29,053	33,343
2006	129,469	4,650	32,715	ne	6,807	5,394	ne	5,327	ne	na	10,513	29,171	34,892
2007old ^a	133,929	4,739	33,629	ne	7,359	5,423	ne	5,418	ne	na	10,782	30,778	35,801

TABLE 17. Female full-time graduate students in science fields in all institutions, by field: 1977–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
2007new ^a	138,944	4,853	33,789	2,849	7,239	5,173	1,323	5,334	1,320	837	10,669	30,435	35,123
2008	143,480	5,003	34,024	3,275	7,592	5,193	1,611	5,509	1,775	1,041	10,876	31,594	35,987
2009	147,071	5,394	34,518	3,848	7,966	5,362	1,814	5,694	2,271	1,216	11,211	30,196	37,581

na = not applicable; data were not collected at this level of detail. NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex. ne = not eligible; data were not collected for this field prior to 2007.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 18. Female full-time graduate students in engineering fields in all institutions, by field: 1977–2009

Year	Aerospace	Agricultural		Biomedical	Chemical	Civil	Electrical	Engineering	Industrial	Mechanical	Metal-				Petroleum	Engineering,
	Total	engineering	engineering	Architecture ^a	engineering	engineering	engineering ^a	engineering	science	engineering	engineering	lurgical/	Mining	Nuclear	engineering	nec
1977	2,263	27	27	na	68	284	541	382	59	376	141	143	17	46	11	141
1978	NA	NA	NA	na	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	3,441	36	29	na	110	440	894	454	75	579	258	214	24	75	29	224
1980	3,855	54	31	na	131	466	899	558	92	665	316	233	27	73	27	283
1981	4,614	51	44	na	149	534	1,126	711	106	688	347	291	37	72	34	424
1982	5,249	73	51	na	180	674	1,241	818	123	765	433	313	35	73	33	437
1983	5,621	80	61	na	227	771	1,295	963	135	615	483	328	41	74	63	485
1984	6,049	86	70	na	244	734	1,438	1,150	145	624	561	358	41	70	52	476
1985	6,284	126	60	na	243	757	1,492	1,208	118	635	559	443	28	91	47	477
1986	6,978	148	62	na	297	796	1,487	1,467	152	734	627	530	35	99	38	506
1987	7,291	167	89	na	343	882	1,398	1,549	127	735	732	578	35	104	43	509
1988	7,623	168	78	na	371	796	1,565	1,682	128	741	835	586	42	101	31	499
1989	8,144	180	74	na	390	804	1,649	1,822	139	912	855	644	40	119	20	496
1990	8,705	199	87	na	455	903	1,781	1,956	177	913	848	696	47	128	24	491
1991	9,678	254	116	na	495	988	2,019	2,157	182	1,048	942	749	32	145	38	513
1992	10,661	263	134	na	519	1,100	2,328	2,420	185	1,182	1,086	812	25	149	51	407
1993	11,197	291	137	na	573	1,171	2,524	2,437	202	1,180	1,185	812	37	144	55	449
1994	11,578	278	186	na	578	1,196	2,786	2,394	202	1,309	1,217	854	35	117	49	377
1995	11,502	276	190	na	616	1,229	2,817	2,486	182	1,160	1,135	830	33	107	52	389
1996	11,827	283	194	na	624	1,324	2,854	2,610	174	1,097	1,190	831	48	122	49	427
1997	12,508	303	203	na	714	1,370	2,911	2,897	175	1,107	1,289	875	51	122	69	422
1998	12,827	314	223	na	753	1,397	2,941	3,137	222	1,084	1,233	907	45	111	48	412
1999	13,523	325	233	na	890	1,396	3,045	3,374	197	1,136	1,262	848	43	111	73	590
2000	14,852	374	241	na	942	1,546	3,300	3,889	219	1,339	1,344	850	35	125	72	576
2001	16,193	386	260	na	1,087	1,540	3,425	4,473	257	1,429	1,438	989	31	128	78	672
2002	18,417	412	245	na	1,378	1,666	3,780	5,356	304	1,572	1,580	1,062	30	128	95	809
2003	20,076	453	279	na	1,758	1,810	4,118	5,568	364	1,631	1,748	1,128	32	154	116	917
2004	19,819	454	265	na	1,912	1,817	4,161	5,087	378	1,595	1,771	1,141	30	168	120	920
2005	19,472	462	272	na	2,025	1,776	4,122	4,759	352	1,605	1,732	1,188	29	170	104	876
2006	20,682	525	302	na	2,210	1,852	4,169	5,223	383	1,742	1,790	1,212	33	177	106	958
2007old ^a	22,167	502	314	na	2,279	1,930	4,860	5,476	338	1,841	1,914	1,252	36	179	146	1,100

TABLE 18. Female full-time graduate students in engineering fields in all institutions, by field: 1977–2009

Year	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal-lurgical/materials	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec
2007new ^a	22,601	502	314	1,756	2,290	1,959	3,438	5,497	337	1,931	1,913	1,261	24	178	146	1,055
2008	23,626	535	347	2,302	2,374	2,091	3,537	5,425	351	2,011	2,000	1,337	37	159	151	969
2009	25,419	542	367	2,679	2,591	2,318	4,004	5,364	339	2,110	2,283	1,415	42	152	173	1,040

na = not applicable; data were not collected at this level of detail. NA = not available; master's-granting institutions were not surveyed in 1978, and survey of doctorate-granting institutions did not collect data by sex.

nec = not elsewhere classified.

^aIn 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 19. U.S. citizen and permanent resident full-time graduate students in science, engineering, and health fields in all institutions, by field: 1980–2009

Year	All science, engineering, and health	Science and engineering			Health		
		Total	Science	Engineering	Total	Clinical medicine	Other health
1980	188,114	166,158	141,405	24,753	21,956	5,075	16,881
1981	187,574	165,623	139,558	26,065	21,951	4,917	17,034
1982	187,290	166,705	138,209	28,496	20,585	4,437	16,148
1983	190,091	169,889	138,714	31,175	20,202	4,411	15,791
1984	190,477	169,870	137,903	31,967	20,607	4,456	16,151
1985	189,043	168,239	136,402	31,837	20,804	4,513	16,291
1986	191,099	170,382	137,132	33,250	20,717	4,500	16,217
1987	192,262	171,095	137,154	33,941	21,167	4,732	16,435
1988	191,656	170,144	136,619	33,525	21,512	5,008	16,504
1989	195,878	173,343	139,256	34,087	22,535	5,181	17,354
1990	201,632	177,747	143,255	34,492	23,885	5,477	18,408
1991	211,562	185,408	148,329	37,079	26,154	5,748	20,406
1992	225,836	197,399	157,510	39,889	28,437	6,541	21,896
1993	236,291	204,405	163,195	41,210	31,886	7,368	24,518
1994	242,265	206,809	165,657	41,152	35,456	7,901	27,555
1995	242,572	204,113	165,521	38,592	38,459	8,545	29,914
1996	241,160	200,674	164,198	36,476	40,486	8,476	32,010
1997	238,582	195,974	161,097	34,877	42,608	8,982	33,626
1998	236,368	191,945	158,559	33,386	44,423	9,661	34,762
1999	236,247	190,076	157,735	32,341	46,171	10,104	36,067
2000	231,010	185,613	154,545	31,068	45,397	9,696	35,701
2001	233,563	188,135	156,352	31,783	45,428	10,076	35,352
2002	247,608	200,097	164,856	35,241	47,511	11,031	36,480
2003	265,067	212,855	173,624	39,231	52,212	12,469	39,743
2004	273,236	217,345	178,463	38,882	55,891	12,822	43,069
2005	279,275	220,842	181,990	38,852	58,433	12,961	45,472
2006	287,684	225,338	185,004	40,334	62,346	14,222	48,124
2007old ^a	294,556	233,343	191,167	42,176	61,213	14,936	46,277
2007new ^a	299,716	240,319	197,473	42,846	59,397	13,290	46,107
2008	304,912	245,691	201,142	44,549	59,221	14,639	44,582
2009	307,192	256,503	207,858	48,645	50,689	14,349	36,340

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 20. U.S. citizen and permanent resident full-time graduate students in science fields in all institutions, by field: 1980–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
1980	141,405	8,007	32,969	ne	4,521	9,484	ne	6,647	ne	na	17,186	25,461	37,130
1981	139,558	7,995	32,299	ne	4,887	9,436	ne	6,511	ne	na	17,052	25,566	35,812
1982	138,209	7,805	31,522	ne	5,981	9,691	ne	6,926	ne	na	17,586	24,588	34,110
1983	138,714	7,603	31,063	ne	6,677	10,292	ne	6,714	ne	na	18,016	25,468	32,881
1984	137,903	7,579	31,138	ne	6,982	10,162	ne	6,772	ne	na	18,294	24,924	32,052
1985	136,402	7,009	30,497	ne	8,327	9,666	ne	6,995	ne	na	18,189	24,179	31,540
1986	137,132	6,905	30,424	ne	8,912	9,374	ne	7,243	ne	na	18,272	25,085	30,917
1987	137,154	6,575	30,024	ne	8,863	8,485	ne	7,549	ne	na	18,395	26,044	31,219
1988	136,619	6,601	29,986	ne	8,415	8,029	ne	7,738	ne	na	18,141	26,802	30,907
1989	139,256	6,527	30,139	ne	8,616	7,708	ne	7,697	ne	na	18,116	28,021	32,432
1990	143,255	6,313	30,103	ne	8,742	7,808	ne	7,961	ne	na	17,841	29,133	35,354
1991	148,329	6,507	30,906	ne	8,455	7,793	ne	8,380	ne	na	18,276	30,634	37,378
1992	157,510	6,726	32,337	ne	8,881	8,299	ne	8,939	ne	na	18,767	32,548	41,013
1993	163,195	6,835	34,271	ne	9,019	8,661	ne	9,056	ne	na	19,236	33,196	42,921
1994	165,657	6,864	36,020	ne	8,757	8,586	ne	8,876	ne	na	19,136	33,430	43,988
1995	165,521	7,023	37,013	ne	8,627	8,673	ne	8,291	ne	na	18,403	33,574	43,917
1996	164,198	6,905	37,032	ne	8,400	8,399	ne	7,885	ne	na	17,632	33,789	44,156
1997	161,097	6,951	36,498	ne	8,578	8,289	ne	7,262	ne	na	16,805	33,881	42,833
1998	158,559	6,915	36,384	ne	9,042	8,258	ne	7,061	ne	na	16,468	33,410	41,021
1999	157,735	7,176	36,739	ne	9,939	8,268	ne	6,588	ne	na	16,300	32,921	39,804
2000	154,545	7,259	35,967	ne	9,630	8,155	ne	6,345	ne	na	15,601	33,059	38,529
2001	156,352	7,178	36,659	ne	10,164	8,032	ne	6,656	ne	na	15,719	32,471	39,473
2002	164,856	7,363	38,703	ne	11,919	8,570	ne	7,390	ne	na	16,236	32,512	42,163
2003	173,624	7,653	40,561	ne	12,744	8,976	ne	7,923	ne	na	17,193	33,316	45,258
2004	178,463	7,613	41,202	ne	12,719	9,122	ne	8,225	ne	na	18,078	35,211	46,293
2005	181,990	7,304	42,385	ne	12,226	8,871	ne	8,534	ne	na	18,595	36,435	47,640
2006	185,004	7,097	43,257	ne	11,959	8,924	ne	8,749	ne	na	18,979	36,630	49,409
2007old ^a	191,167	7,188	44,525	ne	12,037	8,926	ne	9,063	ne	na	19,460	38,550	51,418
2007new ^a	197,473	7,230	45,085	3,549	11,814	8,547	1,396	8,943	1,830	1,203	19,288	38,134	50,454
2008	201,142	7,413	44,606	4,058	11,684	8,668	1,659	8,942	2,344	1,544	19,360	39,542	51,322
2009	207,858	8,032	45,548	4,757	12,113	9,060	1,891	9,283	3,087	1,864	19,996	37,881	54,346

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 21. U.S. citizen and permanent resident full-time graduate students in engineering fields in all institutions, by field: 1980–2009

Year	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal-lurgical/materials engineering	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec
1980	24,753	759	351	na	657	2,517	4,670	5,666	785	2,297	3,211	1,165	186	600	160	1,729
1981	26,065	882	392	na	691	2,808	5,162	5,665	848	2,029	3,363	1,361	234	605	198	1,827
1982	28,496	945	412	na	723	3,290	5,428	6,421	837	2,190	3,767	1,319	251	569	216	2,128
1983	31,175	1,088	441	na	826	3,650	5,544	7,398	861	1,933	4,327	1,553	273	591	330	2,360
1984	31,967	1,115	467	na	882	3,623	5,687	7,890	788	1,934	4,591	1,679	283	606	327	2,095
1985	31,837	1,258	438	na	914	3,350	5,282	8,137	795	1,874	4,858	1,821	256	600	327	1,927
1986	33,250	1,343	486	na	986	3,432	5,303	8,572	854	2,056	5,218	1,882	250	614	305	1,949
1987	33,941	1,559	509	na	987	3,371	5,090	9,002	782	2,152	5,559	1,860	239	594	326	1,911
1988	33,525	1,502	427	na	1,007	2,971	5,208	9,295	803	2,239	5,299	1,848	196	644	237	1,849
1989	34,087	1,757	377	na	1,027	2,686	5,097	9,723	702	2,438	5,632	1,923	153	628	207	1,737
1990	34,492	1,870	344	na	1,196	2,696	5,375	9,652	745	2,389	5,781	2,015	139	577	155	1,558
1991	37,079	2,201	351	na	1,242	2,815	6,140	9,947	774	2,780	6,120	2,100	125	590	114	1,780
1992	39,889	2,246	417	na	1,404	2,968	7,003	10,548	802	3,088	6,803	2,278	141	611	183	1,397
1993	41,210	2,178	421	na	1,552	3,128	7,440	10,394	824	3,236	7,228	2,298	158	634	169	1,550
1994	41,152	1,862	458	na	1,542	3,381	7,848	10,446	833	3,211	7,090	2,364	144	618	162	1,193
1995	38,592	1,611	433	na	1,634	3,314	7,652	9,399	825	2,885	6,548	2,190	123	536	149	1,293
1996	36,476	1,417	416	na	1,660	3,382	7,509	8,758	631	2,528	6,024	1,988	163	487	125	1,388
1997	34,877	1,327	426	na	1,781	3,281	7,082	8,524	620	2,443	5,591	1,922	163	434	80	1,203
1998	33,386	1,268	426	na	1,826	3,059	6,871	8,139	629	2,255	5,212	1,894	170	389	62	1,186
1999	32,341	1,278	419	na	1,922	2,826	6,492	7,595	566	2,447	5,007	1,712	168	343	86	1,480
2000	31,068	1,358	399	na	1,971	2,777	6,313	7,253	522	2,324	4,569	1,645	94	348	189	1,306
2001	31,783	1,284	418	na	2,109	2,610	6,299	7,750	565	2,144	4,753	1,776	100	314	198	1,463
2002	35,241	1,434	416	na	2,435	2,859	6,703	8,654	696	2,537	5,144	1,880	113	340	239	1,791
2003	39,231	1,680	451	na	2,963	2,918	7,301	9,601	892	2,725	5,820	1,960	118	412	94	2,296
2004	38,882	1,695	430	na	3,190	2,999	7,467	8,792	848	2,562	5,810	1,996	135	470	119	2,369
2005	38,852	1,763	392	na	3,378	2,921	7,474	8,790	827	2,549	5,712	2,066	111	515	103	2,251
2006	40,334	2,047	388	na	3,718	2,977	7,520	8,696	861	2,796	6,026	2,237	78	610	104	2,276
2007old ^a	42,176	2,116	401	na	3,880	2,925	8,863	8,421	763	2,657	6,411	2,257	104	706	135	2,537
2007new ^a	42,846	2,116	401	3,259	3,897	3,011	6,175	8,448	743	2,882	6,404	2,235	65	704	135	2,371
2008	44,549	2,264	425	4,230	4,087	3,079	6,378	8,486	784	3,144	6,567	2,302	93	691	113	1,906
2009	48,645	2,454	483	4,996	4,485	3,304	7,543	8,362	754	3,251	7,462	2,475	110	702	139	2,125

na = not applicable; data were not collected at this level of detail.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 22. Full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by field: 1980–2009

Year	All science, engineering, and health	Science and engineering			Health		
		Total	Science	Engineering	Total	Clinical medicine	Other health
1980	50,302	48,259	30,362	17,897	2,043	699	1,344
1981	54,475	52,329	32,642	19,687	2,146	705	1,441
1982	57,467	55,169	33,881	21,288	2,298	846	1,452
1983	61,926	59,515	36,758	22,757	2,411	907	1,504
1984	63,445	61,087	37,863	23,224	2,358	807	1,551
1985	68,244	65,699	41,618	24,081	2,545	1,012	1,533
1986	75,069	72,347	45,400	26,947	2,722	1,054	1,668
1987	78,794	76,010	47,989	28,021	2,784	1,101	1,683
1988	83,471	80,413	50,906	29,507	3,058	1,190	1,868
1989	86,770	83,477	53,168	30,309	3,293	1,252	2,041
1990	91,150	87,576	56,058	31,518	3,574	1,424	2,150
1991	95,448	91,662	57,707	33,955	3,786	1,475	2,311
1992	96,719	93,009	58,455	34,554	3,710	1,412	2,298
1993	93,353	89,500	56,902	32,598	3,853	1,465	2,388
1994	89,823	86,170	55,752	30,418	3,653	1,325	2,328
1995	86,711	83,058	53,868	29,190	3,653	1,232	2,421
1996	87,376	83,365	53,982	29,383	4,011	1,327	2,684
1997	88,707	84,695	53,884	30,811	4,012	1,230	2,782
1998	91,021	86,998	54,949	32,049	4,023	1,283	2,740
1999	98,176	93,817	58,135	35,682	4,359	1,450	2,909
2000	110,273	105,742	64,534	41,208	4,531	1,333	3,198
2001	120,959	115,886	70,221	45,665	5,073	1,746	3,327
2002	131,383	125,375	75,164	50,211	6,008	2,303	3,705
2003	132,353	126,173	75,188	50,985	6,180	2,273	3,907
2004	129,337	123,184	75,111	48,073	6,153	2,177	3,976
2005	127,345	120,900	75,293	45,607	6,445	2,141	4,304
2006	131,331	124,464	76,980	47,484	6,867	2,345	4,522
2007old ^a	136,304	129,633	78,654	50,979	6,671	2,515	4,156
2007new ^a	137,649	131,223	79,756	51,467	6,426	2,188	4,238
2008	144,701	137,869	84,163	53,706	6,832	2,326	4,506
2009	148,923	141,995	85,703	56,292	6,928	2,376	4,552

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 23. Full-time graduate students with temporary visas in science fields in all institutions, by field: 1980–2009

Year	Total	Agricultural sciences	Biological sciences	Communication ^a	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences ^a	Mathematical sciences	Multidisciplinary/interdisciplinary studies ^a	Neuroscience ^a	Physical sciences	Psychology	Social sciences
1980	30,362	2,342	4,453	ne	2,066	1,387	ne	3,254	ne	na	5,731	1,210	9,919
1981	32,642	2,485	4,723	ne	2,558	1,495	ne	3,641	ne	na	6,258	1,004	10,478
1982	33,881	2,520	4,893	ne	3,190	1,626	ne	3,887	ne	na	6,454	1,079	10,232
1983	36,758	2,627	5,342	ne	3,923	1,669	ne	4,241	ne	na	7,195	1,093	10,668
1984	37,863	2,591	5,621	ne	4,454	1,570	ne	4,537	ne	na	7,560	1,045	10,485
1985	41,618	2,481	6,180	ne	5,534	1,665	ne	4,821	ne	na	8,483	1,156	11,298
1986	45,400	2,691	7,011	ne	6,108	1,867	ne	5,145	ne	na	9,498	1,170	11,910
1987	47,989	2,741	7,861	ne	6,473	1,939	ne	5,494	ne	na	10,028	1,212	12,241
1988	50,906	2,771	8,854	ne	6,718	2,152	ne	5,774	ne	na	10,444	1,316	12,877
1989	53,168	2,766	9,880	ne	6,990	2,304	ne	5,984	ne	na	11,100	1,327	12,817
1990	56,058	2,975	10,545	ne	7,947	2,431	ne	5,904	ne	na	11,649	1,485	13,122
1991	57,707	2,965	11,479	ne	8,091	2,571	ne	5,876	ne	na	11,850	1,624	13,251
1992	58,455	2,946	11,703	ne	8,624	2,677	ne	5,740	ne	na	11,914	1,614	13,237
1993	56,902	2,877	11,830	ne	8,382	2,685	ne	5,474	ne	na	11,380	1,586	12,688
1994	55,752	2,882	11,674	ne	7,944	2,860	ne	5,350	ne	na	10,913	1,858	12,271
1995	53,868	2,812	11,042	ne	7,883	2,586	ne	5,119	ne	na	10,476	1,648	12,302
1996	53,982	2,622	10,422	ne	8,795	2,396	ne	5,081	ne	na	10,299	1,623	12,744
1997	53,884	2,411	10,159	ne	9,757	2,221	ne	4,882	ne	na	10,077	1,670	12,707
1998	54,949	2,284	10,395	ne	10,930	2,186	ne	4,690	ne	na	9,923	1,738	12,803
1999	58,135	2,195	10,207	ne	12,748	2,216	ne	5,208	ne	na	10,335	1,737	13,489
2000	64,534	2,098	10,820	ne	16,928	2,403	ne	5,395	ne	na	10,891	1,860	14,139
2001	70,221	2,227	11,479	ne	19,923	2,472	ne	5,811	ne	na	11,460	2,016	14,833
2002	75,164	2,322	12,848	ne	20,660	2,546	ne	6,319	ne	na	12,383	2,195	15,891
2003	75,188	2,350	13,789	ne	17,964	2,521	ne	6,704	ne	na	13,248	2,458	16,154
2004	75,111	2,427	14,646	ne	16,443	2,563	ne	6,691	ne	na	13,597	2,661	16,083
2005	75,293	2,406	15,312	ne	16,091	2,499	ne	6,727	ne	na	13,805	2,484	15,969
2006	76,980	2,381	15,661	ne	16,801	2,507	ne	6,822	ne	na	13,862	2,364	16,582
2007old ^a	78,654	2,446	15,568	ne	18,474	2,450	ne	6,903	ne	na	13,631	2,616	16,566
2007new ^a	79,756	2,592	15,343	979	18,268	2,345	198	6,725	568	327	13,569	2,544	16,298
2008	84,163	2,719	16,056	1,166	19,654	2,503	277	7,299	766	365	13,894	2,561	16,903
2009	85,703	2,791	15,918	1,334	20,085	2,529	277	7,602	870	397	14,185	2,492	17,223

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 24. Full-time graduate students with temporary visas in engineering fields in all institutions, by field: 1980–2009

Year	Total	Aerospace engineering	Agricultural engineering	Architecture ^a	Biomedical engineering	Chemical engineering	Civil engineering ^a	Electrical engineering	Engineering science	Industrial engineering	Mechanical engineering	Metal-lurgical/materials	Mining engineering	Nuclear engineering	Petroleum engineering	Engineering, nec
1980	17,897	568	310	na	118	1,996	3,288	4,297	363	1,439	2,630	1,109	139	443	213	984
1981	19,687	601	310	na	146	2,208	3,637	4,785	372	1,574	3,059	1,117	155	427	195	1,101
1982	21,288	577	350	na	190	2,347	3,953	5,112	440	1,617	3,500	1,186	122	473	260	1,161
1983	22,757	752	347	na	190	2,243	4,260	5,867	495	1,355	4,003	1,178	155	461	290	1,161
1984	23,224	739	333	na	215	2,135	4,399	6,035	484	1,459	4,107	1,209	141	412	287	1,269
1985	24,081	736	362	na	186	2,218	4,467	6,662	469	1,582	4,017	1,288	135	430	250	1,279
1986	26,947	811	449	na	256	2,193	4,668	7,718	591	1,754	4,571	1,516	192	445	267	1,516
1987	28,021	813	472	na	350	2,333	4,538	8,099	591	2,013	4,671	1,607	196	450	318	1,570
1988	29,507	1,031	496	na	408	2,413	4,738	8,411	615	2,074	5,117	1,661	219	461	362	1,501
1989	30,309	1,015	515	na	552	2,617	4,867	8,743	557	2,246	4,860	1,837	185	484	299	1,532
1990	31,518	1,140	482	na	575	2,780	4,753	9,023	507	2,417	5,086	1,954	195	503	329	1,774
1991	33,955	1,124	509	na	646	3,003	5,188	9,927	590	2,859	5,567	1,994	211	490	401	1,446
1992	34,554	1,060	463	na	723	3,014	5,451	10,429	613	3,025	5,580	2,031	159	473	389	1,144
1993	32,598	1,084	446	na	685	2,951	5,018	9,949	573	2,714	5,167	1,996	153	436	410	1,016
1994	30,418	1,138	450	na	721	2,755	4,793	8,962	514	2,749	4,785	1,779	153	379	360	880
1995	29,190	1,082	457	na	650	2,671	4,596	8,855	418	2,504	4,580	1,722	147	347	311	850
1996	29,383	1,159	420	na	619	2,557	4,282	9,349	426	2,638	4,666	1,736	112	284	317	818
1997	30,811	1,202	365	na	638	2,540	4,324	10,475	398	2,673	4,841	1,772	106	274	381	822
1998	32,049	1,297	370	na	647	2,571	4,283	11,469	485	2,639	4,861	1,842	56	273	419	837
1999	35,682	1,367	378	na	790	2,767	4,745	12,926	469	3,053	5,324	1,851	90	298	449	1,175
2000	41,208	1,401	342	na	868	3,084	5,441	15,709	576	3,725	6,226	1,956	97	312	330	1,141
2001	45,665	1,537	372	na	1,048	3,219	5,803	17,490	653	4,390	6,683	2,201	94	337	340	1,498
2002	50,211	1,569	380	na	1,420	3,420	6,278	19,586	745	4,663	7,368	2,362	94	315	410	1,601
2003	50,985	1,563	449	na	1,754	3,496	6,409	19,328	878	4,373	7,536	2,426	101	340	590	1,742
2004	48,073	1,548	412	na	1,857	3,380	6,121	17,940	893	4,029	6,908	2,363	103	339	541	1,639
2005	45,607	1,478	463	na	1,876	3,218	5,722	17,059	786	3,564	6,466	2,441	101	325	528	1,580
2006	47,484	1,327	505	na	1,948	3,241	5,554	18,683	795	3,625	6,640	2,390	103	300	543	1,830
2007old ^a	50,979	1,366	516	na	2,018	3,350	5,828	20,513	691	4,379	6,759	2,410	105	254	657	2,133
2007new ^a	51,467	1,366	516	838	2,024	3,448	5,161	20,628	689	4,540	6,756	2,378	77	247	657	2,142
2008	53,706	1,427	597	981	2,175	3,683	5,531	20,726	702	5,072	7,196	2,509	114	250	715	2,028
2009	56,292	1,520	601	1,116	2,374	3,806	5,960	20,920	736	5,111	8,147	2,706	102	266	854	2,073

na = not applicable; data were not collected at this level of detail.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 25. Graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	567,121	574,463	582,226	597,643	607,823	619,499	631,489	631,645
Science and engineering	474,645	475,873	478,275	486,287	502,375	516,199	529,275	545,685
Science	347,268	352,307	357,710	363,246	372,120	384,523	391,419	401,008
Agricultural sciences	13,197	13,445	13,123	13,016	13,222	13,528	14,153	15,200
Biological sciences	64,701	66,565	68,479	69,941	71,663	71,932	72,666	73,304
Anatomy	908	897	938	961	979	867	764	833
Biochemistry	5,552	5,612	5,814	5,824	5,959	5,853	5,473	5,271
Biology	14,770	15,458	15,681	16,463	16,212	15,898	16,514	16,840
Biometry/epidemiology	4,439	4,674	4,805	4,789	5,483	5,694	5,971	5,739
Biophysics	1,032	1,180	1,183	1,203	1,214	1,193	1,084	1,042
Botany	1,901	1,831	1,860	1,850	1,891	1,821	1,803	1,831
Cell biology	5,689	5,830	6,177	6,553	6,696	6,839	7,096	7,153
Ecology	2,230	2,185	2,165	2,162	2,191	2,026	2,026	1,746
Entomology/parasitology	1,206	1,241	1,126	1,114	1,078	1,078	1,079	1,079
Genetics	2,073	2,129	2,155	2,154	2,152	2,120	2,120	2,242
Microbiology/immunology/virology	5,256	5,375	5,401	5,324	5,314	5,212	5,054	4,968
Nutrition	4,695	4,771	4,817	5,042	5,250	4,890	5,177	5,330
Pathology	1,541	1,557	1,593	1,612	1,633	1,580	1,618	1,450
Pharmacology	3,357	3,122	3,114	2,985	3,030	3,013	3,005	3,163
Physiology	2,328	2,409	2,399	2,416	2,406	2,738	2,863	2,866
Zoology	1,301	1,236	1,264	1,145	1,084	1,108	925	875
Biological sciences, nec	6,423	7,058	7,987	8,344	9,091	10,002	10,094	10,876
Communication ^a	ne	ne	ne	ne	ne	7,303	8,444	9,418
Computer sciences	53,696	50,016	47,978	47,653	48,959	48,246	49,553	51,161
Earth, atmospheric, and ocean sciences	14,620	15,131	14,836	14,920	14,675	14,100	14,389	14,839
Atmospheric sciences	1,150	1,086	1,146	1,079	1,117	1,178	1,400	1,355
Geosciences	6,889	7,358	7,212	7,177	7,061	7,020	7,089	7,539
Oceanography	2,695	2,801	2,760	2,770	2,663	2,615	2,634	2,633
Earth/atmospheric/ocean sciences, nec	3,886	3,886	3,718	3,894	3,834	3,287	3,266	3,312
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	2,780	3,549	3,794
Mathematical sciences	19,465	19,931	20,210	20,815	21,335	20,975	21,400	22,226
Mathematics/applied mathematics	15,569	15,964	16,106	16,649	16,894	16,528	16,449	17,204
Statistics	3,896	3,967	4,104	4,166	4,441	4,447	4,951	5,022
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	4,484	5,559	6,557
Neuroscience ^a	na	na	na	na	na	1,584	2,012	2,356
Physical sciences	34,298	35,761	36,375	36,901	37,111	36,824	37,319	38,149
Astronomy	1,080	1,119	1,191	1,211	1,233	1,232	1,275	1,409
Chemistry	20,049	20,776	21,101	21,351	21,424	21,298	21,574	22,094
Physics	12,555	13,298	13,472	13,722	13,845	13,816	13,862	14,060
Physical sciences, nec	614	568	611	617	609	478	608	586
Psychology	52,162	54,126	57,282	57,653	60,284	59,617	58,991	56,184
Clinical psychology	13,118	13,771	14,283	13,947	14,517	14,495	13,691	13,113
Psychology, general	15,364	16,089	16,620	16,622	18,366	17,923	17,322	15,148
Psychology, nec	23,680	24,266	26,379	27,084	27,401	27,199	27,978	27,923
Social sciences	95,129	97,332	99,427	102,347	104,871	103,150	103,384	107,820
Agricultural economics	2,318	2,195	2,127	2,158	2,126	1,989	2,132	2,222
Anthropology (cultural/social)	7,789	7,826	7,750	8,150	8,099	8,129	8,333	8,359
Economics (except agricultural)	12,316	12,318	11,805	12,132	12,328	12,597	12,971	13,993
Geography	4,721	4,809	4,800	4,750	4,660	4,660	4,745	4,810
History and philosophy of science	737	994	965	968	1,119	1,054	1,177	1,006
Linguistics	3,028	2,941	3,187	3,074	3,076	2,879	3,095	3,170

TABLE 25. Graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	36,880	39,023	40,780	41,784	41,854	41,349	40,871	43,919
Sociology	9,127	8,874	9,018	9,035	9,734	9,642	10,002	9,731
Sociology/anthropology	773	839	848	837	831	682	653	576
Social sciences, nec	17,440	17,513	18,147	19,459	21,044	20,169	19,405	20,034
Engineering	127,377	123,566	120,565	123,041	130,255	131,676	137,856	144,677
Aerospace engineering	4,048	4,089	4,170	4,482	4,616	4,616	4,902	5,266
Agricultural engineering	1,058	1,041	1,059	1,073	1,126	1,126	1,233	1,303
Architecture ^a	na	na	na	na	na	4,601	5,905	6,804
Biomedical engineering	5,301	5,807	6,067	6,482	6,881	6,904	7,339	7,904
Chemical engineering	7,516	7,452	7,173	7,261	7,383	7,584	7,892	8,188
Civil engineering ^a	18,890	18,561	18,114	17,802	19,867	16,071	16,931	18,638
Electrical engineering	41,763	38,995	37,450	38,265	40,207	40,588	41,164	41,218
Engineering science	2,240	2,198	1,951	2,046	1,843	1,806	2,099	2,168
Industrial engineering	14,313	13,852	13,650	13,829	14,290	14,474	15,692	15,825
Mechanical engineering	18,393	17,852	17,373	17,919	18,366	18,347	19,585	21,243
Metallurgical/materials engineering	5,131	5,059	5,160	5,268	5,365	5,314	5,539	5,863
Mining engineering	278	308	279	244	307	222	290	312
Nuclear engineering	885	971	1,013	1,099	1,208	1,180	1,201	1,243
Petroleum engineering	849	845	808	813	1,014	1,014	1,009	1,190
Engineering, nec	6,712	6,536	6,298	6,458	7,782	7,829	7,075	7,512
Health	92,476	98,590	103,951	111,356	105,448	103,300	102,214	85,960
Clinical medicine	20,574	20,866	21,414	23,441	24,616	22,751	23,939	24,125
Anesthesiology	1,216	1,337	1,363	1,370	883	883	589	402
Cardiology	36	39	33	32	51	51	47	50
Endocrinology	80	63	56	42	40	40	64	50
Gastroenterology	11	16	7	18	28	28	15	15
Hematology	25	30	13	14	9	9	8	11
Neurology ^a	2,665	2,642	2,783	2,981	3,381	1,751	1,462	1,323
Obstetrics/gynecology	28	17	21	54	81	81	83	89
Oncology/cancer research	234	274	331	341	355	264	260	272
Ophthalmology	413	423	394	414	407	379	1	1
Otorhinolaryngology	9	12	12	14	15	15	14	4
Pediatrics	429	424	278	284	302	302	207	186
Preventive medicine/community health	12,312	12,335	12,605	14,320	15,561	16,209	17,901	18,797
Psychiatry	277	403	250	274	278	218	188	233
Pulmonary disease	14	7	27	10	24	24	13	13
Radiology	302	262	276	288	270	281	320	385
Surgery	84	75	88	105	47	31	31	40
Clinical medicine, nec	2,439	2,507	2,877	2,880	2,884	2,185	2,736	2,254
Other health	71,902	77,724	82,537	87,915	80,832	80,549	78,275	61,835
Dental sciences	1,654	1,946	1,748	1,614	1,537	1,688	1,643	1,770
Nursing	26,649	29,781	31,670	35,846	31,747	31,803	30,471	21,355
Pharmaceutical sciences	5,493	5,218	6,091	6,315	4,964	5,066	4,251	4,443

TABLE 25. Graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	13,694	14,045	14,821	14,847	16,237	16,229	15,968	14,641
Veterinary sciences	1,719	1,732	1,970	2,067	2,020	2,371	2,478	2,170
Other health, nec	22,693	25,002	26,237	27,226	24,327	23,392	23,464	17,456

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 26. Male graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	298,682	296,714	295,291	299,818	308,152	312,009	320,310	328,525
Science and engineering	276,248	274,008	271,967	275,181	284,080	288,926	297,278	307,936
Science	176,458	177,714	178,297	180,084	183,799	187,722	190,959	196,577
Agricultural sciences	7,171	7,187	6,921	6,717	6,778	6,901	7,262	7,715
Biological sciences	28,818	29,276	29,958	30,572	31,012	31,178	31,332	31,486
Anatomy	442	430	472	474	474	439	381	405
Biochemistry	2,957	2,969	2,996	3,012	3,060	2,985	2,782	2,656
Biology	6,612	6,841	7,043	7,407	7,170	7,007	7,288	7,346
Biometry/epidemiology	1,668	1,807	1,796	1,804	2,153	2,282	2,411	2,344
Biophysics	693	746	775	798	796	776	701	665
Botany	905	857	875	888	914	881	858	860
Cell biology	2,683	2,735	2,887	3,023	3,043	3,097	3,193	3,203
Ecology	1,022	993	955	938	942	887	900	786
Entomology/parasitology	669	676	606	596	571	571	575	567
Genetics	857	846	846	837	868	846	843	891
Microbiology/immunology/virology	2,323	2,322	2,319	2,274	2,254	2,208	2,121	2,057
Nutrition	1,037	1,050	1,026	1,101	1,133	1,025	1,005	1,030
Pathology	631	635	635	631	634	616	607	540
Pharmacology	1,539	1,429	1,401	1,321	1,351	1,342	1,326	1,391
Physiology	1,184	1,180	1,144	1,141	1,129	1,278	1,358	1,441
Zoology	656	596	628	559	513	513	459	399
Biological sciences, nec	2,940	3,164	3,554	3,768	4,007	4,425	4,524	4,905
Communication ^a	ne	ne	ne	ne	ne	2,656	3,063	3,389
Computer sciences	38,880	36,739	35,933	35,591	36,753	36,229	37,008	38,108
Earth, atmospheric, and ocean sciences	8,082	8,199	7,941	7,916	7,724	7,450	7,768	8,024
Atmospheric sciences	776	723	758	712	722	759	951	908
Geosciences	4,125	4,299	4,169	4,096	4,006	3,980	4,047	4,344
Oceanography	1,303	1,292	1,279	1,273	1,199	1,176	1,201	1,202
Earth/atmospheric/ocean sciences, nec	1,878	1,885	1,735	1,835	1,797	1,535	1,569	1,570
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	453	591	591
Mathematical sciences	12,176	12,434	12,773	13,122	13,554	13,297	13,649	14,247
Mathematics/applied mathematics	10,163	10,351	10,546	10,877	11,143	10,880	10,909	11,417
Statistics	2,013	2,083	2,227	2,245	2,411	2,417	2,740	2,830
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	1,924	2,325	2,748
Neuroscience ^a	na	na	na	na	na	721	915	1,092
Physical sciences	23,520	24,461	24,649	24,896	24,858	24,715	24,986	25,458
Astronomy	735	764	797	804	819	818	865	978
Chemistry	12,210	12,544	12,678	12,707	12,603	12,528	12,591	12,872
Physics	10,189	10,797	10,803	11,012	11,069	11,048	11,104	11,214
Physical sciences, nec	386	356	371	373	367	321	426	394
Psychology	13,383	13,970	13,963	13,950	14,690	14,501	14,376	13,648
Clinical psychology	3,163	3,148	3,271	3,104	3,223	3,226	3,102	2,908
Psychology, general	4,544	5,131	4,690	4,633	4,961	4,887	4,741	4,281
Psychology, nec	5,676	5,691	6,002	6,213	6,506	6,388	6,533	6,459
Social sciences	44,428	45,448	46,159	47,320	48,430	47,697	47,684	50,071
Agricultural economics	1,418	1,341	1,252	1,249	1,219	1,140	1,218	1,273
Anthropology (cultural/social)	2,919	2,853	2,810	2,935	2,948	2,960	3,019	3,022
Economics (except agricultural)	7,808	7,833	7,551	7,789	7,773	7,898	8,156	8,873
Geography	2,693	2,801	2,787	2,748	2,689	2,689	2,746	2,739
History and philosophy of science	425	580	525	540	637	605	681	597
Linguistics	1,023	1,014	1,132	1,088	1,083	1,003	1,093	1,230

TABLE 26. Male graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	17,038	18,203	18,898	19,545	19,708	19,529	19,175	20,540
Sociology	3,226	3,080	3,225	3,242	3,499	3,479	3,562	3,572
Sociology/anthropology	267	292	303	290	279	227	229	205
Social sciences, nec	7,611	7,451	7,676	7,894	8,595	8,167	7,805	8,020
Engineering	99,790	96,294	93,670	95,097	100,281	101,204	106,319	111,359
Aerospace engineering	3,445	3,489	3,563	3,773	3,916	3,916	4,180	4,532
Agricultural engineering	743	730	736	723	760	760	835	866
Architecture ^a	na	na	na	na	na	2,627	3,293	3,807
Biomedical engineering	3,357	3,624	3,770	3,996	4,271	4,283	4,578	4,925
Chemical engineering	5,416	5,346	5,094	5,102	5,148	5,318	5,483	5,572
Civil engineering ^a	13,492	13,120	12,709	12,379	13,519	11,335	12,166	13,337
Electrical engineering	33,969	31,794	30,662	31,239	32,840	33,149	33,824	34,044
Engineering science	1,775	1,733	1,532	1,595	1,431	1,397	1,628	1,690
Industrial engineering	11,047	10,622	10,354	10,363	10,770	10,930	11,978	12,025
Mechanical engineering	16,039	15,396	14,965	15,434	15,751	15,733	16,836	18,253
Metallurgical/materials engineering	3,800	3,738	3,812	3,878	3,905	3,841	4,006	4,274
Mining engineering	236	266	240	201	256	185	241	257
Nuclear engineering	703	775	802	885	982	959	987	1,045
Petroleum engineering	720	711	687	678	831	831	818	981
Engineering, nec	5,048	4,950	4,744	4,851	5,901	5,940	5,466	5,751
Health	22,434	22,706	23,324	24,637	24,072	23,083	23,032	20,589
Clinical medicine	7,751	7,395	7,339	7,908	8,310	7,401	7,592	7,680
Anesthesiology	498	469	463	465	322	322	235	153
Cardiology	26	28	20	21	22	22	25	30
Endocrinology	47	24	25	21	16	16	17	17
Gastroenterology	1	7	2	8	14	14	8	7
Hematology	10	14	8	10	2	2	4	5
Neurology ^a	1,348	1,311	1,357	1,410	1,561	819	680	647
Obstetrics/gynecology	16	7	12	21	24	24	18	20
Oncology/cancer research	90	117	142	146	148	112	106	116
Ophthalmology	142	148	130	134	116	106	1	1
Otorhinolaryngology	7	11	7	7	6	6	5	2
Pediatrics	64	61	49	48	53	53	44	45
Preventive medicine/community health	4,099	3,825	3,676	4,207	4,550	4,741	5,083	5,345
Psychiatry	60	82	52	55	44	41	36	51
Pulmonary disease	6	1	14	6	15	15	7	4
Radiology	172	139	144	148	186	196	235	270
Surgery	58	45	61	64	26	20	20	22
Clinical medicine, nec	1,107	1,106	1,177	1,137	1,205	892	1,068	945
Other health	14,683	15,311	15,985	16,729	15,762	15,682	15,440	12,909
Dental sciences	998	1,105	967	928	912	989	964	1,019
Nursing	2,752	2,800	2,939	3,307	2,905	2,893	2,725	1,893
Pharmaceutical sciences	2,481	2,314	2,645	2,783	2,294	2,344	2,040	2,145
Speech pathology/audiology	958	986	965	997	1,263	1,249	1,213	1,051
Veterinary sciences	687	692	729	758	727	861	881	808
Other health, nec	6,807	7,414	7,740	7,956	7,661	7,346	7,617	5,993

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 27. Female graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	268,439	277,749	286,935	297,825	299,671	307,490	311,179	303,120
Science and engineering	198,397	201,865	206,308	211,106	218,295	227,273	231,997	237,749
Science	170,810	174,593	179,413	183,162	188,321	196,801	200,460	204,431
Agricultural sciences	6,026	6,258	6,202	6,299	6,444	6,627	6,891	7,485
Biological sciences	35,883	37,289	38,521	39,369	40,651	40,754	41,334	41,818
Anatomy	466	467	466	487	505	428	383	428
Biochemistry	2,595	2,643	2,818	2,812	2,899	2,868	2,691	2,615
Biology	8,158	8,617	8,638	9,056	9,042	8,891	9,226	9,494
Biometry/epidemiology	2,771	2,867	3,009	2,985	3,330	3,412	3,560	3,395
Biophysics	339	434	408	405	418	417	383	377
Botany	996	974	985	962	977	940	945	971
Cell biology	3,006	3,095	3,290	3,530	3,653	3,742	3,903	3,950
Ecology	1,208	1,192	1,210	1,224	1,249	1,139	1,126	960
Entomology/parasitology	537	565	520	518	507	507	504	512
Genetics	1,216	1,283	1,309	1,317	1,284	1,274	1,277	1,351
Microbiology/immunology/virology	2,933	3,053	3,082	3,050	3,060	3,004	2,933	2,911
Nutrition	3,658	3,721	3,791	3,941	4,117	3,865	4,172	4,300
Pathology	910	922	958	981	999	964	1,011	910
Pharmacology	1,818	1,693	1,713	1,664	1,679	1,671	1,679	1,772
Physiology	1,144	1,229	1,255	1,275	1,277	1,460	1,505	1,425
Zoology	645	640	636	586	571	595	466	476
Biological sciences, nec	3,483	3,894	4,433	4,576	5,084	5,577	5,570	5,971
Communication ^a	ne	ne	ne	ne	ne	4,647	5,381	6,029
Computer sciences	14,816	13,277	12,045	12,062	12,206	12,017	12,545	13,053
Earth, atmospheric, and ocean sciences	6,538	6,932	6,895	7,004	6,951	6,650	6,621	6,815
Atmospheric sciences	374	363	388	367	395	419	449	447
Geosciences	2,764	3,059	3,043	3,081	3,055	3,040	3,042	3,195
Oceanography	1,392	1,509	1,481	1,497	1,464	1,439	1,433	1,431
Earth/atmospheric/ocean sciences, nec	2,008	2,001	1,983	2,059	2,037	1,752	1,697	1,742
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	2,327	2,958	3,203
Mathematical sciences	7,289	7,497	7,437	7,693	7,781	7,678	7,751	7,979
Mathematics/applied mathematics	5,406	5,613	5,560	5,772	5,751	5,648	5,540	5,787
Statistics	1,883	1,884	1,877	1,921	2,030	2,030	2,211	2,192
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,560	3,234	3,809
Neuroscience ^a	na	na	na	na	na	863	1,097	1,264
Physical sciences	10,778	11,300	11,726	12,005	12,253	12,109	12,333	12,691
Astronomy	345	355	394	407	414	414	410	431
Chemistry	7,839	8,232	8,423	8,644	8,821	8,770	8,983	9,222
Physics	2,366	2,501	2,669	2,710	2,776	2,768	2,758	2,846
Physical sciences, nec	228	212	240	244	242	157	182	192
Psychology	38,779	40,156	43,319	43,703	45,594	45,116	44,615	42,536
Clinical psychology	9,955	10,623	11,012	10,843	11,294	11,269	10,589	10,205
Psychology, general	10,820	10,958	11,930	11,989	13,405	13,036	12,581	10,867
Psychology, nec	18,004	18,575	20,377	20,871	20,895	20,811	21,445	21,464
Social sciences	50,701	51,884	53,268	55,027	56,441	55,453	55,700	57,749
Agricultural economics	900	854	875	909	907	849	914	949
Anthropology (cultural/social)	4,870	4,973	4,940	5,215	5,151	5,169	5,314	5,337
Economics (except agricultural)	4,508	4,485	4,254	4,343	4,555	4,699	4,815	5,120
Geography	2,028	2,008	2,013	2,002	1,971	1,971	1,999	2,071
History and philosophy of science	312	414	440	428	482	449	496	409
Linguistics	2,005	1,927	2,055	1,986	1,993	1,876	2,002	1,940

TABLE 27. Female graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	19,842	20,820	21,882	22,239	22,146	21,820	21,696	23,379
Sociology	5,901	5,794	5,793	5,793	6,235	6,163	6,440	6,159
Sociology/anthropology	506	547	545	547	552	455	424	371
Social sciences, nec	9,829	10,062	10,471	11,565	12,449	12,002	11,600	12,014
Engineering	27,587	27,272	26,895	27,944	29,974	30,472	31,537	33,318
Aerospace engineering	603	600	607	709	700	700	722	734
Agricultural engineering	315	311	323	350	366	366	398	437
Architecture ^a	na	na	na	na	na	1,974	2,612	2,997
Biomedical engineering	1,944	2,183	2,297	2,486	2,610	2,621	2,761	2,979
Chemical engineering	2,100	2,106	2,079	2,159	2,235	2,266	2,409	2,616
Civil engineering ^a	5,398	5,441	5,405	5,423	6,348	4,736	4,765	5,301
Electrical engineering	7,794	7,201	6,788	7,026	7,367	7,439	7,340	7,174
Engineering science	465	465	419	451	412	409	471	478
Industrial engineering	3,266	3,230	3,296	3,466	3,520	3,544	3,714	3,800
Mechanical engineering	2,354	2,456	2,408	2,485	2,615	2,614	2,749	2,990
Metallurgical/materials engineering	1,331	1,321	1,348	1,390	1,460	1,473	1,533	1,589
Mining engineering	42	42	39	43	51	37	49	55
Nuclear engineering	182	196	211	214	226	221	214	198
Petroleum engineering	129	134	121	135	183	183	191	209
Engineering, nec	1,664	1,586	1,554	1,607	1,881	1,889	1,609	1,761
Health	70,042	75,884	80,627	86,719	81,376	80,217	79,182	65,371
Clinical medicine	12,823	13,471	14,075	15,533	16,306	15,350	16,347	16,445
Anesthesiology	718	868	900	905	561	561	354	249
Cardiology	10	11	13	11	29	29	22	20
Endocrinology	33	39	31	21	24	24	47	33
Gastroenterology	10	9	5	10	14	14	7	8
Hematology	15	16	5	4	7	7	4	6
Neurology ^a	1,317	1,331	1,426	1,571	1,820	932	782	676
Obstetrics/gynecology	12	10	9	33	57	57	65	69
Oncology/cancer research	144	157	189	195	207	152	154	156
Ophthalmology	271	275	264	280	291	273	0	0
Otorhinolaryngology	2	1	5	7	9	9	9	2
Pediatrics	365	363	229	236	249	249	163	141
Preventive medicine/community health	8,213	8,510	8,929	10,113	11,011	11,468	12,818	13,452
Psychiatry	217	321	198	219	234	177	152	182
Pulmonary disease	8	6	13	4	9	9	6	9
Radiology	130	123	132	140	84	85	85	115
Surgery	26	30	27	41	21	11	11	18
Clinical medicine, nec	1,332	1,401	1,700	1,743	1,679	1,293	1,668	1,309
Other health	57,219	62,413	66,552	71,186	65,070	64,867	62,835	48,926
Dental sciences	656	841	781	686	625	699	679	751
Nursing	23,897	26,981	28,731	32,539	28,842	28,910	27,746	19,462
Pharmaceutical sciences	3,012	2,904	3,446	3,532	2,670	2,722	2,211	2,298

TABLE 27. Female graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	12,736	13,059	13,856	13,850	14,974	14,980	14,755	13,590
Veterinary sciences	1,032	1,040	1,241	1,309	1,293	1,510	1,597	1,362
Other health, nec	15,886	17,588	18,497	19,270	16,666	16,046	15,847	11,463

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 28. Graduate students in science, engineering, and health fields in public institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	406,692	405,636	408,134	413,848	421,243	430,952	439,895	443,866
Science and engineering	339,108	335,634	335,593	337,239	347,855	358,697	368,646	382,564
Science	243,790	244,451	247,547	248,699	253,309	263,056	268,501	276,898
Agricultural sciences	12,508	12,766	12,446	12,342	12,568	12,906	13,465	14,191
Biological sciences	46,436	46,788	48,435	49,360	50,342	50,175	50,181	50,273
Anatomy	643	611	646	607	638	510	456	528
Biochemistry	3,951	3,894	4,088	4,066	4,197	4,142	3,727	3,699
Biology	11,245	11,647	11,964	12,546	12,137	11,946	12,417	12,623
Biometry/epidemiology	2,856	2,724	2,782	2,881	3,105	3,260	3,357	3,177
Biophysics	680	732	739	772	766	745	676	641
Botany	1,827	1,759	1,788	1,775	1,815	1,745	1,728	1,754
Cell biology	3,649	3,684	3,960	4,224	4,352	4,463	4,656	4,627
Ecology	1,952	1,933	1,893	1,899	1,899	1,709	1,705	1,427
Entomology/parasitology	1,158	1,197	1,094	1,079	1,043	1,043	1,047	1,047
Genetics	1,272	1,247	1,302	1,300	1,297	1,240	1,243	1,247
Microbiology/immunology/virology	3,383	3,398	3,420	3,342	3,330	3,294	3,200	3,165
Nutrition	3,655	3,718	3,889	3,991	4,286	3,926	4,026	4,050
Pathology	995	998	958	1,006	955	867	859	824
Pharmacology	2,283	2,025	2,104	1,923	1,978	2,010	1,982	2,058
Physiology	1,397	1,443	1,450	1,536	1,560	1,855	1,950	1,944
Zoology	1,244	1,204	1,254	1,138	1,078	1,102	919	869
Biological sciences, nec	4,246	4,574	5,104	5,275	5,906	6,318	6,233	6,593
Communication ^a	ne	ne	ne	ne	ne	5,957	6,813	7,496
Computer sciences	34,754	31,861	30,849	30,386	31,051	30,468	31,782	33,271
Earth, atmospheric, and ocean sciences	12,368	12,766	12,455	12,506	12,329	11,749	11,914	12,347
Atmospheric sciences	1,114	1,042	1,089	1,047	1,066	1,127	1,334	1,294
Geosciences	5,736	6,131	5,997	5,948	5,928	5,887	5,903	6,358
Oceanography	2,276	2,372	2,282	2,292	2,208	2,160	2,130	2,139
Earth/atmospheric/ocean sciences, nec	3,242	3,221	3,087	3,219	3,127	2,575	2,547	2,556
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	2,509	3,052	3,224
Mathematical sciences	15,546	15,734	15,988	16,284	16,746	16,623	16,934	17,628
Mathematics/applied mathematics	12,416	12,558	12,760	13,014	13,264	13,153	13,076	13,788
Statistics	3,130	3,176	3,228	3,270	3,482	3,470	3,858	3,840
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	3,590	4,265	4,823
Neuroscience ^a	na	na	na	na	na	1,030	1,200	1,348
Physical sciences	25,340	26,511	27,209	27,422	27,504	27,217	27,497	28,319
Astronomy	637	663	690	679	698	697	704	821
Chemistry	14,859	15,436	15,876	15,980	15,936	15,810	16,013	16,538
Physics	9,237	9,851	10,039	10,154	10,269	10,240	10,293	10,501
Physical sciences, nec	607	561	604	609	601	470	487	459
Psychology	28,768	28,673	29,596	28,807	30,839	30,311	30,554	29,910
Clinical psychology	3,957	3,908	3,758	3,749	3,852	3,807	3,728	3,927
Psychology, general	10,849	10,839	11,349	11,408	11,462	11,207	11,424	10,761
Psychology, nec	13,962	13,926	14,489	13,650	15,525	15,297	15,402	15,222
Social sciences	68,070	69,352	70,569	71,592	71,930	70,521	70,844	74,068
Agricultural economics	2,246	2,110	2,055	2,088	2,053	1,916	2,051	2,137
Anthropology (cultural/social)	5,879	5,959	5,860	6,224	6,158	6,188	6,336	6,400
Economics (except agricultural)	8,445	8,546	8,181	8,334	8,249	8,391	8,602	9,330
Geography	4,422	4,513	4,527	4,443	4,342	4,342	4,404	4,392
History and philosophy of science	508	756	708	727	866	852	893	861
Linguistics	2,324	2,295	2,329	2,456	2,434	2,354	2,478	2,548

TABLE 28. Graduate students in science, engineering, and health fields in public institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	23,693	24,712	25,312	25,034	25,475	25,160	25,024	26,631
Sociology	7,063	6,908	6,997	7,001	6,935	6,912	7,372	7,329
Sociology/anthropology	639	704	710	730	751	602	569	490
Social sciences, nec	12,851	12,849	13,890	14,555	14,667	13,804	13,115	13,950
Engineering	95,318	91,183	88,046	88,540	94,546	95,641	100,145	105,666
Aerospace engineering	2,908	2,995	3,030	3,211	3,320	3,320	3,595	3,993
Agricultural engineering	993	979	999	1,011	1,059	1,059	1,173	1,230
Architecture ^a	na	na	na	na	na	3,728	4,742	5,505
Biomedical engineering	3,498	3,688	3,793	3,984	4,308	4,308	4,783	4,895
Chemical engineering	5,519	5,422	5,142	5,125	5,186	5,330	5,523	5,782
Civil engineering ^a	15,266	14,967	14,612	14,248	15,757	12,834	13,499	14,876
Electrical engineering	30,365	27,945	26,618	26,736	28,559	28,955	29,517	30,080
Engineering science	1,482	1,362	1,088	1,091	1,120	1,079	1,303	1,386
Industrial engineering	9,798	9,223	8,683	8,793	9,582	9,286	10,092	9,916
Mechanical engineering	14,342	13,565	12,911	13,075	13,261	13,242	13,841	15,061
Metallurgical/materials engineering	3,803	3,802	3,992	4,055	4,133	4,082	4,197	4,430
Mining engineering	273	308	279	244	307	222	290	312
Nuclear engineering	773	872	913	992	1,086	1,058	1,065	1,110
Petroleum engineering	729	708	692	701	895	895	863	1,015
Engineering, nec	5,569	5,347	5,294	5,274	5,973	6,243	5,662	6,075
Health	67,584	70,002	72,541	76,609	73,388	72,255	71,249	61,302
Clinical medicine	12,791	12,644	12,951	13,182	14,955	14,012	15,026	15,310
Anesthesiology	619	655	634	637	479	479	251	190
Cardiology	9	0	0	3	0	0	25	24
Endocrinology	78	62	56	42	40	40	44	50
Gastroenterology	11	16	7	18	19	19	7	13
Hematology	13	23	13	14	8	8	5	8
Neurology ^a	1,540	1,419	1,497	1,570	1,879	814	671	637
Obstetrics/gynecology	13	3	10	16	14	14	5	8
Oncology/cancer research	116	137	186	179	202	171	124	149
Ophthalmology	399	404	392	406	407	379	1	1
Otorhinolaryngology	9	12	12	12	12	12	14	4
Pediatrics	361	355	211	211	231	231	147	114
Preventive medicine/community health	7,753	7,546	7,833	8,022	9,280	9,733	11,087	11,711
Psychiatry	232	357	197	236	233	173	133	165
Pulmonary disease	14	6	26	9	10	10	12	13
Radiology	237	236	253	261	253	264	273	306
Surgery	75	68	81	99	40	24	18	28
Clinical medicine, nec	1,312	1,345	1,543	1,447	1,848	1,641	2,209	1,889
Other health	54,793	57,358	59,590	63,427	58,433	58,243	56,223	45,992
Dental sciences	1,365	1,629	1,447	1,311	1,190	1,298	1,333	1,303
Nursing	21,464	23,522	24,043	26,563	22,914	22,970	21,535	13,708
Pharmaceutical sciences	4,517	3,964	4,302	4,257	3,493	3,589	3,211	3,483
Speech pathology/audiology	10,821	10,796	11,297	11,438	12,755	12,747	12,457	12,613
Veterinary sciences	1,667	1,674	1,858	1,951	1,872	2,124	2,244	1,981
Other health, nec	14,959	15,773	16,643	17,907	16,209	15,515	15,443	12,904

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 29. Graduate students in science, engineering, and health fields in private institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	160,429	168,827	174,092	183,795	186,580	188,547	191,594	187,779
Science and engineering	135,537	140,239	142,682	149,048	154,520	157,502	160,629	163,121
Science	103,478	107,856	110,163	114,547	118,811	121,467	122,918	124,110
Agricultural sciences	689	679	677	674	654	622	688	1,009
Biological sciences	18,265	19,777	20,044	20,581	21,321	21,757	22,485	23,031
Anatomy	265	286	292	354	341	357	308	305
Biochemistry	1,601	1,718	1,726	1,758	1,762	1,711	1,746	1,572
Biology	3,525	3,811	3,717	3,917	4,075	3,952	4,097	4,217
Biometry/epidemiology	1,583	1,950	2,023	1,908	2,378	2,434	2,614	2,562
Biophysics	352	448	444	431	448	448	408	401
Botany	74	72	72	75	76	76	75	77
Cell biology	2,040	2,146	2,217	2,329	2,344	2,376	2,440	2,526
Ecology	278	252	272	263	292	317	321	319
Entomology/parasitology	48	44	32	35	35	35	32	32
Genetics	801	882	853	854	855	880	877	995
Microbiology/immunology/virology	1,873	1,977	1,981	1,982	1,984	1,918	1,854	1,803
Nutrition	1,040	1,053	928	1,051	964	964	1,151	1,280
Pathology	546	559	635	606	678	713	759	626
Pharmacology	1,074	1,097	1,010	1,062	1,052	1,003	1,023	1,105
Physiology	931	966	949	880	846	883	913	922
Zoology	57	32	10	7	6	6	6	6
Biological sciences, nec	2,177	2,484	2,883	3,069	3,185	3,684	3,861	4,283
Communication ^a	ne	ne	ne	ne	ne	1,346	1,631	1,922
Computer sciences	18,942	18,155	17,129	17,267	17,908	17,778	17,771	17,890
Earth, atmospheric, and ocean sciences	2,252	2,365	2,381	2,414	2,346	2,351	2,475	2,492
Atmospheric sciences	36	44	57	32	51	51	66	61
Geosciences	1,153	1,227	1,215	1,229	1,133	1,133	1,186	1,181
Oceanography	419	429	478	478	455	455	504	494
Earth/atmospheric/ocean sciences, nec	644	665	631	675	707	712	719	756
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	271	497	570
Mathematical sciences	3,919	4,197	4,222	4,531	4,589	4,352	4,466	4,598
Mathematics/applied mathematics	3,153	3,406	3,346	3,635	3,630	3,375	3,373	3,416
Statistics	766	791	876	896	959	977	1,093	1,182
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	894	1,294	1,734
Neuroscience ^a	na	na	na	na	na	554	812	1,008
Physical sciences	8,958	9,250	9,166	9,479	9,607	9,607	9,822	9,830
Astronomy	443	456	501	532	535	535	571	588
Chemistry	5,190	5,340	5,225	5,371	5,488	5,488	5,561	5,556
Physics	3,318	3,447	3,433	3,568	3,576	3,576	3,569	3,559
Physical sciences, nec	7	7	7	8	8	8	121	127
Psychology	23,394	25,453	27,686	28,846	29,445	29,306	28,437	26,274
Clinical psychology	9,161	9,863	10,525	10,198	10,665	10,688	9,963	9,186
Psychology, general	4,515	5,250	5,271	5,214	6,904	6,716	5,898	4,387
Psychology, nec	9,718	10,340	11,890	13,434	11,876	11,902	12,576	12,701
Social sciences	27,059	27,980	28,858	30,755	32,941	32,629	32,540	33,752
Agricultural economics	72	85	72	70	73	73	81	85
Anthropology (cultural/social)	1,910	1,867	1,890	1,926	1,941	1,941	1,997	1,959
Economics (except agricultural)	3,871	3,772	3,624	3,798	4,079	4,206	4,369	4,663
Geography	299	296	273	307	318	318	341	418
History and philosophy of science	229	238	257	241	253	202	284	145
Linguistics	704	646	858	618	642	525	617	622

TABLE 29. Graduate students in science, engineering, and health fields in private institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	13,187	14,311	15,468	16,750	16,379	16,189	15,847	17,288
Sociology	2,064	1,966	2,021	2,034	2,799	2,730	2,630	2,402
Sociology/anthropology	134	135	138	107	80	80	84	86
Social sciences, nec	4,589	4,664	4,257	4,904	6,377	6,365	6,290	6,084
Engineering	32,059	32,383	32,519	34,501	35,709	36,035	37,711	39,011
Aerospace engineering	1,140	1,094	1,140	1,271	1,296	1,296	1,307	1,273
Agricultural engineering	65	62	60	62	67	67	60	73
Architecture ^a	na	na	na	na	na	873	1,163	1,299
Biomedical engineering	1,803	2,119	2,274	2,498	2,573	2,596	2,556	3,009
Chemical engineering	1,997	2,030	2,031	2,136	2,197	2,254	2,369	2,406
Civil engineering ^a	3,624	3,594	3,502	3,554	4,110	3,237	3,432	3,762
Electrical engineering	11,398	11,050	10,832	11,529	11,648	11,633	11,647	11,138
Engineering science	758	836	863	955	723	727	796	782
Industrial engineering	4,515	4,629	4,967	5,036	4,708	5,188	5,600	5,909
Mechanical engineering	4,051	4,287	4,462	4,844	5,105	5,105	5,744	6,182
Metallurgical/materials engineering	1,328	1,257	1,168	1,213	1,232	1,232	1,342	1,433
Mining engineering	5	0	0	0	0	0	0	0
Nuclear engineering	112	99	100	107	122	122	136	133
Petroleum engineering	120	137	116	112	119	119	146	175
Engineering, nec	1,143	1,189	1,004	1,184	1,809	1,586	1,413	1,437
Health	24,892	28,588	31,410	34,747	32,060	31,045	30,965	24,658
Clinical medicine	7,783	8,222	8,463	10,259	9,661	8,739	8,913	8,815
Anesthesiology	597	682	729	733	404	404	338	212
Cardiology	27	39	33	29	51	51	22	26
Endocrinology	2	1	0	0	0	0	20	0
Gastroenterology	0	0	0	0	9	9	8	2
Hematology	12	7	0	0	1	1	3	3
Neurology ^a	1,125	1,223	1,286	1,411	1,502	937	791	686
Obstetrics/gynecology	15	14	11	38	67	67	78	81
Oncology/cancer research	118	137	145	162	153	93	136	123
Ophthalmology	14	19	2	8	0	0	0	0
Otorhinolaryngology	0	0	0	2	3	3	0	0
Pediatrics	68	69	67	73	71	71	60	72
Preventive medicine/community health	4,559	4,789	4,772	6,298	6,281	6,476	6,814	7,086
Psychiatry	45	46	53	38	45	45	55	68
Pulmonary disease	0	1	1	1	14	14	1	0
Radiology	65	26	23	27	17	17	47	79
Surgery	9	7	7	6	7	7	13	12
Clinical medicine, nec	1,127	1,162	1,334	1,433	1,036	544	527	365
Other health	17,109	20,366	22,947	24,488	22,399	22,306	22,052	15,843
Dental sciences	289	317	301	303	347	390	310	467
Nursing	5,185	6,259	7,627	9,283	8,833	8,833	8,936	7,647
Pharmaceutical sciences	976	1,254	1,789	2,058	1,471	1,477	1,040	960
Speech pathology/audiology	2,873	3,249	3,524	3,409	3,482	3,482	3,511	2,028
Veterinary sciences	52	58	112	116	148	247	234	189
Other health, nec	7,734	9,229	9,594	9,319	8,118	7,877	8,021	4,552

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 30. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	567,121	574,463	582,226	597,643	607,823	619,499	631,489	631,645
U.S. citizens and permanent residents	412,105	423,218	434,730	446,625	450,251	460,294	463,450	459,648
American Indian/Alaska Native	2,399	2,354	2,485	2,689	2,777	2,862	3,286	3,042
Asian/Pacific Islander	38,155	37,735	37,764	37,863	38,396	38,782	38,005	38,660
Black, non-Hispanic	31,242	32,496	33,547	34,866	34,934	35,923	37,047	37,349
Hispanic	26,684	28,031	29,309	30,510	31,110	31,700	31,648	32,336
White, non-Hispanic	283,241	288,574	292,276	299,275	298,917	306,001	306,989	302,677
Other or unknown	30,384	34,028	39,349	41,422	44,117	45,026	46,475	45,584
Temporary visa holders	155,016	151,245	147,496	151,018	157,572	159,205	168,039	171,997
Science and engineering	474,645	475,873	478,275	486,287	502,375	516,199	529,275	545,685
U.S. citizens and permanent residents	327,181	332,022	338,513	343,603	353,142	365,091	369,781	382,342
American Indian/Alaska Native	1,879	1,848	1,958	2,112	2,168	2,262	2,618	2,549
Asian/Pacific Islander	31,786	30,645	30,574	30,179	31,279	31,897	31,477	32,879
Black, non-Hispanic	24,174	24,624	25,248	25,664	26,565	27,637	28,680	29,973
Hispanic	21,241	22,212	23,387	24,140	25,032	25,739	26,098	27,265
White, non-Hispanic	222,674	224,850	225,776	227,993	232,043	240,204	242,623	250,443
Other or unknown	25,427	27,843	31,570	33,515	36,055	37,352	38,285	39,233
Temporary visa holders	147,464	143,851	139,762	142,684	149,233	151,108	159,494	163,343
Science	347,268	352,307	357,710	363,246	372,120	384,523	391,419	401,008
U.S. citizens and permanent residents	259,871	265,643	271,962	275,905	282,785	293,792	295,530	303,700
American Indian/Alaska Native	1,575	1,575	1,685	1,822	1,882	1,972	2,272	2,205
Asian/Pacific Islander	21,099	20,933	20,844	21,000	21,764	22,259	21,773	22,952
Black, non-Hispanic	20,962	21,225	21,778	22,092	22,881	23,862	24,694	25,801
Hispanic	17,262	18,048	19,297	19,759	20,515	21,176	21,382	22,047
White, non-Hispanic	179,205	181,615	182,908	184,700	187,292	194,875	195,037	200,047
Other or unknown	19,768	22,247	25,450	26,532	28,451	29,648	30,372	30,648
Temporary visa holders	87,397	86,664	85,748	87,341	89,335	90,731	95,889	97,308
Agricultural sciences	13,197	13,445	13,123	13,016	13,222	13,528	14,153	15,200
U.S. citizens and permanent residents	10,601	10,750	10,464	10,341	10,487	10,631	11,047	11,938
American Indian/Alaska Native	77	82	76	85	87	88	130	134
Asian/Pacific Islander	316	329	290	338	333	340	384	399
Black, non-Hispanic	460	394	417	453	431	434	470	406
Hispanic	490	524	506	535	576	604	611	749
White, non-Hispanic	8,799	8,936	8,662	8,384	8,452	8,572	8,725	9,421
Other or unknown	459	485	513	546	608	593	727	829
Temporary visa holders	2,596	2,695	2,659	2,675	2,735	2,897	3,106	3,262
Biological sciences	64,701	66,565	68,479	69,941	71,663	71,932	72,666	73,304
U.S. citizens and permanent residents	49,865	50,734	52,012	53,034	54,784	55,305	55,112	55,955
American Indian/Alaska Native	236	248	277	310	300	302	335	330
Asian/Pacific Islander	5,158	5,277	5,420	5,709	6,016	6,113	5,799	6,164
Black, non-Hispanic	2,757	2,902	2,991	3,071	3,303	3,320	3,394	3,575
Hispanic	2,830	2,993	3,146	3,289	3,470	3,474	3,498	3,719
White, non-Hispanic	35,809	36,053	36,627	37,163	37,605	37,682	37,585	37,464
Other or unknown	3,075	3,261	3,551	3,492	4,090	4,414	4,501	4,703
Temporary visa holders	14,836	15,831	16,467	16,907	16,879	16,627	17,554	17,349
Communication ^a	ne	ne	ne	ne	ne	7,303	8,444	9,418
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	6,150	7,049	7,806
American Indian/Alaska Native	ne	ne	ne	ne	ne	32	50	52
Asian/Pacific Islander	ne	ne	ne	ne	ne	243	305	348
Black, non-Hispanic	ne	ne	ne	ne	ne	516	644	688
Hispanic	ne	ne	ne	ne	ne	386	437	443
White, non-Hispanic	ne	ne	ne	ne	ne	4,400	4,880	5,506
Other or unknown	ne	ne	ne	ne	ne	573	733	769
Temporary visa holders	ne	ne	ne	ne	ne	1,153	1,395	1,612

TABLE 30. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Computer sciences	53,696	50,016	47,978	47,653	48,959	48,246	49,553	51,161
U.S. citizens and permanent residents	29,420	28,261	27,409	26,675	25,957	25,441	25,316	26,325
American Indian/Alaska Native	104	91	100	105	96	94	130	128
Asian/Pacific Islander	5,767	5,102	4,573	4,222	3,838	3,732	3,618	3,916
Black, non-Hispanic	1,951	1,799	1,761	1,774	1,865	1,834	1,889	2,088
Hispanic	1,101	1,142	1,199	1,207	1,191	1,170	1,227	1,371
White, non-Hispanic	17,260	16,938	16,555	15,943	15,089	14,811	14,930	15,533
Other or unknown	3,237	3,189	3,221	3,424	3,878	3,800	3,522	3,289
Temporary visa holders	24,276	21,755	20,569	20,978	23,002	22,805	24,237	24,836
Earth, atmospheric, and ocean sciences	14,620	15,131	14,836	14,920	14,675	14,100	14,389	14,839
U.S. citizens and permanent residents	11,837	12,337	12,058	12,153	11,952	11,488	11,612	12,082
American Indian/Alaska Native	63	67	61	69	88	80	74	75
Asian/Pacific Islander	355	428	400	389	421	388	387	415
Black, non-Hispanic	270	261	262	263	279	272	301	311
Hispanic	484	538	508	540	555	522	525	585
White, non-Hispanic	9,963	10,342	10,126	10,116	9,783	9,443	9,354	9,651
Other or unknown	702	701	701	776	826	783	971	1,045
Temporary visa holders	2,783	2,794	2,778	2,767	2,723	2,612	2,777	2,757
Family and consumer science/human science ^a	ne	ne	ne	ne	ne	2,780	3,549	3,794
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	2,534	3,214	3,452
American Indian/Alaska Native	ne	ne	ne	ne	ne	23	22	23
Asian/Pacific Islander	ne	ne	ne	ne	ne	90	145	137
Black, non-Hispanic	ne	ne	ne	ne	ne	322	397	538
Hispanic	ne	ne	ne	ne	ne	87	135	158
White, non-Hispanic	ne	ne	ne	ne	ne	1,870	2,247	2,390
Other or unknown	ne	ne	ne	ne	ne	142	268	206
Temporary visa holders	ne	ne	ne	ne	ne	246	335	342
Mathematical sciences	19,465	19,931	20,210	20,815	21,335	20,975	21,400	22,226
U.S. citizens and permanent residents	12,057	12,524	12,768	13,219	13,608	13,432	13,235	13,911
American Indian/Alaska Native	25	39	38	59	47	45	58	47
Asian/Pacific Islander	1,364	1,298	1,372	1,413	1,418	1,387	1,360	1,457
Black, non-Hispanic	655	696	720	711	711	708	681	730
Hispanic	604	625	633	695	764	758	710	788
White, non-Hispanic	8,414	8,859	8,916	9,201	9,329	9,219	9,154	9,527
Other or unknown	995	1,007	1,089	1,140	1,339	1,315	1,272	1,362
Temporary visa holders	7,408	7,407	7,442	7,596	7,727	7,543	8,165	8,315
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	4,484	5,559	6,557
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	3,788	4,653	5,528
American Indian/Alaska Native	ne	ne	ne	ne	ne	52	55	54
Asian/Pacific Islander	ne	ne	ne	ne	ne	224	256	302
Black, non-Hispanic	ne	ne	ne	ne	ne	320	388	480
Hispanic	ne	ne	ne	ne	ne	253	360	401
White, non-Hispanic	ne	ne	ne	ne	ne	2,457	2,959	3,422
Other or unknown	ne	ne	ne	ne	ne	482	635	869
Temporary visa holders	ne	ne	ne	ne	ne	696	906	1,029
Neuroscience ^a	na	na	na	na	na	1,584	2,012	2,356
U.S. citizens and permanent residents	na	na	na	na	na	1,253	1,634	1,949
American Indian/Alaska Native	na	na	na	na	na	7	11	12
Asian/Pacific Islander	na	na	na	na	na	141	186	222
Black, non-Hispanic	na	na	na	na	na	61	67	88
Hispanic	na	na	na	na	na	81	100	118
White, non-Hispanic	na	na	na	na	na	893	1,153	1,326
Other or unknown	na	na	na	na	na	70	117	183
Temporary visa holders	na	na	na	na	na	331	378	407

TABLE 30. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Physical sciences	34,298	35,761	36,375	36,901	37,111	36,824	37,319	38,149
U.S. citizens and permanent residents	20,171	21,148	21,675	22,144	22,636	22,417	22,556	23,071
American Indian/Alaska Native	79	78	82	118	105	103	111	119
Asian/Pacific Islander	1,577	1,678	1,631	1,753	1,892	1,877	1,771	1,871
Black, non-Hispanic	939	993	1,006	1,009	984	980	1,009	979
Hispanic	1,094	1,233	1,242	1,256	1,270	1,264	1,268	1,282
White, non-Hispanic	15,107	15,726	16,299	16,325	16,628	16,451	16,520	16,933
Other or unknown	1,375	1,440	1,415	1,683	1,757	1,742	1,877	1,887
Temporary visa holders	14,127	14,613	14,700	14,757	14,475	14,407	14,763	15,078
Psychology	52,162	54,126	57,282	57,653	60,284	59,617	58,991	56,184
U.S. citizens and permanent residents	49,055	50,932	54,228	54,802	57,171	56,574	55,912	53,246
American Indian/Alaska Native	324	323	332	344	404	402	398	384
Asian/Pacific Islander	2,374	2,443	2,551	2,612	2,896	2,869	2,810	2,659
Black, non-Hispanic	4,692	4,990	5,238	5,089	5,140	5,100	5,358	5,393
Hispanic	4,677	4,791	5,101	5,222	5,526	5,506	5,543	5,003
White, non-Hispanic	33,552	33,580	34,359	35,045	36,976	36,519	35,530	34,342
Other or unknown	3,436	4,805	6,647	6,490	6,229	6,178	6,273	5,465
Temporary visa holders	3,107	3,194	3,054	2,851	3,113	3,043	3,079	2,938
Social sciences	95,129	97,332	99,427	102,347	104,871	103,150	103,384	107,820
U.S. citizens and permanent residents	76,865	78,957	81,348	83,537	86,190	84,779	84,190	88,437
American Indian/Alaska Native	667	647	719	732	755	744	898	847
Asian/Pacific Islander	4,188	4,378	4,607	4,564	4,950	4,855	4,752	5,062
Black, non-Hispanic	9,238	9,190	9,383	9,722	10,168	9,995	10,096	10,525
Hispanic	5,982	6,202	6,962	7,015	7,163	7,071	6,968	7,430
White, non-Hispanic	50,301	51,181	51,364	52,523	53,430	52,558	52,000	54,532
Other or unknown	6,489	7,359	8,313	8,981	9,724	9,556	9,476	10,041
Temporary visa holders	18,264	18,375	18,079	18,810	18,681	18,371	19,194	19,383
Engineering	127,377	123,566	120,565	123,041	130,255	131,676	137,856	144,677
U.S. citizens and permanent residents	67,310	66,379	66,551	67,698	70,357	71,299	74,251	78,642
American Indian/Alaska Native	304	273	273	290	286	290	346	344
Asian/Pacific Islander	10,687	9,712	9,730	9,179	9,515	9,638	9,704	9,927
Black, non-Hispanic	3,212	3,399	3,470	3,572	3,684	3,775	3,986	4,172
Hispanic	3,979	4,164	4,090	4,381	4,517	4,563	4,716	5,218
White, non-Hispanic	43,469	43,235	42,868	43,293	44,751	45,329	47,586	50,396
Other or unknown	5,659	5,596	6,120	6,983	7,604	7,704	7,913	8,585
Temporary visa holders	60,067	57,187	54,014	55,343	59,898	60,377	63,605	66,035
Aerospace engineering	4,048	4,089	4,170	4,482	4,616	4,616	4,902	5,266
U.S. citizens and permanent residents	2,361	2,401	2,528	2,998	3,090	3,090	3,311	3,605
American Indian/Alaska Native	15	16	13	10	13	13	18	16
Asian/Pacific Islander	207	212	251	312	346	346	366	377
Black, non-Hispanic	59	68	73	79	81	81	103	108
Hispanic	119	118	116	136	145	145	159	195
White, non-Hispanic	1,747	1,791	1,844	1,969	2,152	2,152	2,244	2,485
Other or unknown	214	196	231	492	353	353	421	424
Temporary visa holders	1,687	1,688	1,642	1,484	1,526	1,526	1,591	1,661
Agricultural engineering	1,058	1,041	1,059	1,073	1,126	1,126	1,233	1,303
U.S. citizens and permanent residents	568	556	538	524	542	542	566	630
American Indian/Alaska Native	2	1	3	5	2	2	2	1
Asian/Pacific Islander	36	47	37	34	34	34	27	24
Black, non-Hispanic	30	23	25	27	22	22	20	30
Hispanic	14	8	13	16	14	14	21	27
White, non-Hispanic	464	463	441	425	439	439	473	513
Other or unknown	22	14	19	17	31	31	23	35
Temporary visa holders	490	485	521	549	584	584	667	673

TABLE 30. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Architecture ^a	na	na	na	na	na	4,601	5,905	6,804
U.S. citizens and permanent residents	na	na	na	na	na	3,707	4,840	5,611
American Indian/Alaska Native	na	na	na	na	na	15	42	32
Asian/Pacific Islander	na	na	na	na	na	228	299	325
Black, non-Hispanic	na	na	na	na	na	219	282	300
Hispanic	na	na	na	na	na	208	385	454
White, non-Hispanic	na	na	na	na	na	2,730	3,417	3,968
Other or unknown	na	na	na	na	na	307	415	532
Temporary visa holders	na	na	na	na	na	894	1,065	1,193
Biomedical engineering	5,301	5,807	6,067	6,482	6,881	6,904	7,339	7,904
U.S. citizens and permanent residents	3,397	3,675	3,921	4,298	4,524	4,541	4,772	5,237
American Indian/Alaska Native	7	15	13	18	19	19	21	20
Asian/Pacific Islander	643	742	795	877	951	952	939	1,116
Black, non-Hispanic	156	191	192	204	206	206	224	245
Hispanic	155	180	192	237	242	242	226	301
White, non-Hispanic	2,163	2,314	2,424	2,626	2,646	2,662	2,932	3,142
Other or unknown	273	233	305	336	460	460	430	413
Temporary visa holders	1,904	2,132	2,146	2,184	2,357	2,363	2,567	2,667
Chemical engineering	7,516	7,452	7,173	7,261	7,383	7,584	7,892	8,188
U.S. citizens and permanent residents	3,736	3,753	3,675	3,685	3,647	3,744	3,821	4,022
American Indian/Alaska Native	19	27	24	20	16	16	15	14
Asian/Pacific Islander	540	453	493	496	475	485	494	536
Black, non-Hispanic	173	169	146	149	149	155	150	172
Hispanic	249	249	240	277	261	261	238	225
White, non-Hispanic	2,554	2,666	2,561	2,556	2,520	2,601	2,672	2,809
Other or unknown	201	189	211	187	226	226	252	266
Temporary visa holders	3,780	3,699	3,498	3,576	3,736	3,840	4,071	4,166
Civil engineering ^a	18,890	18,561	18,114	17,802	19,867	16,071	16,931	18,638
U.S. citizens and permanent residents	11,458	11,436	11,415	11,421	13,051	9,972	10,477	11,750
American Indian/Alaska Native	65	51	52	62	70	58	50	59
Asian/Pacific Islander	1,024	997	1,006	957	1,054	874	949	1,136
Black, non-Hispanic	428	453	456	508	603	461	475	528
Hispanic	846	898	896	967	1,068	892	796	915
White, non-Hispanic	8,333	8,270	8,139	7,971	9,115	6,807	7,265	7,884
Other or unknown	762	767	866	956	1,141	880	942	1,228
Temporary visa holders	7,432	7,125	6,699	6,381	6,816	6,099	6,454	6,888
Electrical engineering	41,763	38,995	37,450	38,265	40,207	40,588	41,164	41,218
U.S. citizens and permanent residents	18,118	16,878	16,662	16,166	15,759	16,024	16,042	15,936
American Indian/Alaska Native	63	54	54	46	47	48	61	54
Asian/Pacific Islander	4,606	3,823	3,762	3,414	3,099	3,164	3,127	3,041
Black, non-Hispanic	812	850	843	828	842	861	864	900
Hispanic	1,094	1,097	1,090	1,044	979	996	1,007	1,072
White, non-Hispanic	9,709	9,444	9,150	8,875	8,789	8,933	8,734	8,908
Other or unknown	1,834	1,610	1,763	1,959	2,003	2,022	2,249	1,961
Temporary visa holders	23,645	22,117	20,788	22,099	24,448	24,564	25,122	25,282
Engineering science	2,240	2,198	1,951	2,046	1,843	1,806	2,099	2,168
U.S. citizens and permanent residents	1,230	1,187	1,096	1,170	1,024	989	1,216	1,229
American Indian/Alaska Native	11	11	9	9	8	7	7	6
Asian/Pacific Islander	152	163	143	159	155	143	145	134
Black, non-Hispanic	42	38	36	44	28	28	42	51
Hispanic	49	45	43	46	35	32	63	69
White, non-Hispanic	928	865	793	830	719	709	827	821
Other or unknown	48	65	72	82	79	70	132	148
Temporary visa holders	1,010	1,011	855	876	819	817	883	939

TABLE 30. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Industrial engineering	14,313	13,852	13,650	13,829	14,290	14,474	15,692	15,825
U.S. citizens and permanent residents	8,820	8,763	9,071	9,249	9,020	9,090	9,464	9,511
American Indian/Alaska Native	52	48	51	55	46	47	51	61
Asian/Pacific Islander	998	929	1,026	1,010	1,032	1,068	1,069	977
Black, non-Hispanic	685	714	764	763	741	734	849	826
Hispanic	562	629	579	664	661	664	703	717
White, non-Hispanic	5,680	5,484	5,658	5,586	5,300	5,293	5,543	5,305
Other or unknown	843	959	993	1,171	1,240	1,284	1,249	1,625
Temporary visa holders	5,493	5,089	4,579	4,580	5,270	5,384	6,228	6,314
Mechanical engineering	18,393	17,852	17,373	17,919	18,366	18,347	19,585	21,243
U.S. citizens and permanent residents	9,602	9,724	9,719	10,205	10,495	10,481	11,075	11,893
American Indian/Alaska Native	42	24	28	32	33	33	37	43
Asian/Pacific Islander	994	973	962	940	1,242	1,243	1,280	1,225
Black, non-Hispanic	382	369	411	419	409	408	425	431
Hispanic	537	566	575	621	653	656	685	749
White, non-Hispanic	6,883	6,998	6,898	7,337	7,232	7,213	7,591	8,334
Other or unknown	764	794	845	856	926	928	1,057	1,111
Temporary visa holders	8,791	8,128	7,654	7,714	7,871	7,866	8,510	9,350
Metallurgical/materials engineering	5,131	5,059	5,160	5,268	5,365	5,314	5,539	5,863
U.S. citizens and permanent residents	2,546	2,501	2,518	2,690	2,739	2,719	2,796	2,949
American Indian/Alaska Native	8	6	5	8	9	9	13	11
Asian/Pacific Islander	316	346	315	337	341	338	359	362
Black, non-Hispanic	110	105	102	129	131	127	126	112
Hispanic	98	99	106	98	116	117	118	145
White, non-Hispanic	1,909	1,815	1,859	1,926	1,924	1,900	1,988	2,119
Other or unknown	105	130	131	192	218	228	192	200
Temporary visa holders	2,585	2,558	2,642	2,578	2,626	2,595	2,743	2,914
Mining engineering	278	308	279	244	307	222	290	312
U.S. citizens and permanent residents	167	189	161	129	183	130	165	197
American Indian/Alaska Native	4	1	0	1	0	0	3	1
Asian/Pacific Islander	5	6	6	1	10	8	7	10
Black, non-Hispanic	2	5	3	3	7	0	4	8
Hispanic	3	10	9	5	5	4	9	10
White, non-Hispanic	138	157	121	108	151	111	133	156
Other or unknown	15	10	22	11	10	7	9	12
Temporary visa holders	111	119	118	115	124	92	125	115
Nuclear engineering	885	971	1,013	1,099	1,208	1,180	1,201	1,243
U.S. citizens and permanent residents	532	616	674	780	924	904	933	958
American Indian/Alaska Native	1	3	3	2	2	2	4	4
Asian/Pacific Islander	30	42	47	45	48	48	60	58
Black, non-Hispanic	12	20	21	18	22	22	26	22
Hispanic	31	28	38	60	49	48	47	42
White, non-Hispanic	439	492	534	603	699	681	734	763
Other or unknown	19	31	31	52	104	103	62	69
Temporary visa holders	353	355	339	319	284	276	268	285
Petroleum engineering	849	845	808	813	1,014	1,014	1,009	1,190
U.S. citizens and permanent residents	174	194	192	195	258	258	217	252
American Indian/Alaska Native	0	0	0	0	0	0	1	1
Asian/Pacific Islander	12	24	21	15	17	17	20	25
Black, non-Hispanic	11	21	31	24	43	43	29	23
Hispanic	13	15	17	22	32	32	18	20
White, non-Hispanic	125	123	114	117	150	150	138	176
Other or unknown	13	11	9	17	16	16	11	7
Temporary visa holders	675	651	616	618	756	756	792	938

TABLE 30. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Engineering, nec	6,712	6,536	6,298	6,458	7,782	7,829	7,075	7,512
U.S. citizens and permanent residents	4,601	4,506	4,381	4,188	5,101	5,108	4,556	4,862
American Indian/Alaska Native	15	16	18	22	21	21	21	21
Asian/Pacific Islander	1,124	955	866	582	711	690	563	581
Black, non-Hispanic	310	373	367	377	400	408	367	416
Hispanic	209	222	176	188	257	252	241	277
White, non-Hispanic	2,397	2,353	2,332	2,364	2,915	2,948	2,895	3,013
Other or unknown	546	587	622	655	797	789	469	554
Temporary visa holders	2,111	2,030	1,917	2,270	2,681	2,721	2,519	2,650
Health ^a	92,476	98,590	103,951	111,356	105,448	103,300	102,214	85,960
U.S. citizens and permanent residents	84,924	91,196	96,217	103,022	97,109	95,203	93,669	77,306
American Indian/Alaska Native	520	506	527	577	609	600	668	493
Asian/Pacific Islander	6,369	7,090	7,190	7,684	7,117	6,885	6,528	5,781
Black, non-Hispanic	7,068	7,872	8,299	9,202	8,369	8,286	8,367	7,376
Hispanic	5,443	5,819	5,922	6,370	6,078	5,961	5,550	5,071
White, non-Hispanic	60,567	63,724	66,500	71,282	66,874	65,797	64,366	52,234
Other or unknown	4,957	6,185	7,779	7,907	8,062	7,674	8,190	6,351
Temporary visa holders	7,552	7,394	7,734	8,334	8,339	8,097	8,545	8,654

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer science/human science" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/Division of Science Resources Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 31. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	298,682	296,714	295,291	299,818	308,152	312,009	320,310	328,525
U.S. citizens and permanent residents	193,658	195,664	197,701	200,584	204,725	207,985	211,121	217,261
American Indian/Alaska Native	1,017	958	997	1,096	1,126	1,149	1,340	1,293
Asian/Pacific Islander	19,900	18,865	18,652	18,503	18,909	19,034	18,670	19,390
Black, non-Hispanic	10,758	11,157	11,118	11,450	11,660	11,910	12,452	12,810
Hispanic	11,457	11,964	12,274	12,681	13,004	13,173	13,269	14,196
White, non-Hispanic	135,082	135,981	136,225	137,216	138,916	141,317	143,467	147,124
Other or unknown	15,444	16,739	18,435	19,638	21,110	21,402	21,923	22,448
Temporary visa holders	105,024	101,050	97,590	99,234	103,427	104,024	109,189	111,264
Science and engineering	276,248	274,008	271,967	275,181	284,080	288,926	297,278	307,936
U.S. citizens and permanent residents	174,818	176,297	177,900	179,783	184,498	188,642	191,989	200,642
American Indian/Alaska Native	890	847	908	979	1,001	1,027	1,187	1,179
Asian/Pacific Islander	17,963	16,940	16,689	16,413	16,903	17,135	16,950	17,797
Black, non-Hispanic	9,456	9,777	9,625	9,780	10,194	10,475	10,974	11,454
Hispanic	10,182	10,591	10,919	11,301	11,671	11,891	12,073	13,030
White, non-Hispanic	122,130	122,938	123,187	123,478	125,371	128,272	130,577	136,156
Other or unknown	14,197	15,204	16,572	17,832	19,358	19,842	20,228	21,026
Temporary visa holders	101,430	97,711	94,067	95,398	99,582	100,284	105,289	107,294
Science	176,458	177,714	178,297	180,084	183,799	187,722	190,959	196,577
U.S. citizens and permanent residents	122,940	125,163	126,629	127,551	130,491	134,043	134,734	139,894
American Indian/Alaska Native	671	649	702	761	777	802	938	913
Asian/Pacific Islander	10,378	10,188	9,960	9,830	10,054	10,207	9,869	10,553
Black, non-Hispanic	7,285	7,507	7,255	7,337	7,721	7,954	8,271	8,597
Hispanic	7,260	7,526	7,926	8,115	8,396	8,584	8,607	9,163
White, non-Hispanic	87,553	88,561	89,006	89,186	90,131	92,662	93,056	96,365
Other or unknown	9,793	10,732	11,780	12,322	13,412	13,834	13,993	14,303
Temporary visa holders	53,518	52,551	51,668	52,533	53,308	53,679	56,225	56,683
Agricultural sciences	7,171	7,187	6,921	6,717	6,778	6,901	7,262	7,715
U.S. citizens and permanent residents	5,613	5,583	5,352	5,184	5,229	5,274	5,559	5,973
American Indian/Alaska Native	38	35	31	39	39	40	53	57
Asian/Pacific Islander	151	136	132	165	155	157	155	176
Black, non-Hispanic	194	153	172	152	148	152	181	162
Hispanic	251	267	243	258	275	288	289	376
White, non-Hispanic	4,738	4,745	4,516	4,314	4,316	4,352	4,541	4,819
Other or unknown	241	247	258	256	296	285	340	383
Temporary visa holders	1,558	1,604	1,569	1,533	1,549	1,627	1,703	1,742
Biological sciences	28,818	29,276	29,958	30,572	31,012	31,178	31,332	31,486
U.S. citizens and permanent residents	21,889	21,993	22,409	22,730	23,290	23,580	23,350	23,672
American Indian/Alaska Native	89	91	113	128	134	135	148	136
Asian/Pacific Islander	2,264	2,252	2,294	2,354	2,509	2,560	2,373	2,556
Black, non-Hispanic	858	869	928	948	1,042	1,049	1,093	1,119
Hispanic	1,218	1,252	1,320	1,363	1,396	1,404	1,405	1,465
White, non-Hispanic	16,060	16,031	16,212	16,391	16,490	16,546	16,412	16,378
Other or unknown	1,400	1,498	1,542	1,546	1,719	1,886	1,919	2,018
Temporary visa holders	6,929	7,283	7,549	7,842	7,722	7,598	7,982	7,814
Communication ^a	ne	ne	ne	ne	ne	2,656	3,063	3,389
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	2,223	2,532	2,815
American Indian/Alaska Native	ne	ne	ne	ne	ne	13	15	16
Asian/Pacific Islander	ne	ne	ne	ne	ne	78	110	111
Black, non-Hispanic	ne	ne	ne	ne	ne	141	208	229
Hispanic	ne	ne	ne	ne	ne	116	135	148
White, non-Hispanic	ne	ne	ne	ne	ne	1,667	1,820	2,016
Other or unknown	ne	ne	ne	ne	ne	208	244	295
Temporary visa holders	ne	ne	ne	ne	ne	433	531	574

TABLE 31. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Computer sciences	38,880	36,739	35,933	35,591	36,753	36,229	37,008	38,108
U.S. citizens and permanent residents	21,369	20,899	20,633	19,934	19,788	19,421	19,301	20,025
American Indian/Alaska Native	68	61	67	78	80	79	96	100
Asian/Pacific Islander	3,794	3,451	3,170	2,922	2,684	2,615	2,515	2,730
Black, non-Hispanic	1,128	1,091	1,047	1,052	1,161	1,139	1,181	1,289
Hispanic	815	859	927	936	905	888	940	1,078
White, non-Hispanic	13,221	13,089	12,934	12,362	11,998	11,799	11,866	12,341
Other or unknown	2,343	2,348	2,488	2,584	2,960	2,901	2,703	2,487
Temporary visa holders	17,511	15,840	15,300	15,657	16,965	16,808	17,707	18,083
Earth, atmospheric, and ocean sciences	8,082	8,199	7,941	7,916	7,724	7,450	7,768	8,024
U.S. citizens and permanent residents	6,344	6,483	6,262	6,255	6,099	5,895	6,135	6,365
American Indian/Alaska Native	30	40	30	43	53	49	39	46
Asian/Pacific Islander	158	201	187	173	201	192	187	187
Black, non-Hispanic	130	120	110	118	124	121	140	153
Hispanic	223	236	227	229	252	239	245	277
White, non-Hispanic	5,422	5,521	5,328	5,286	5,035	4,879	4,971	5,160
Other or unknown	381	365	380	406	434	415	553	542
Temporary visa holders	1,738	1,716	1,679	1,661	1,625	1,555	1,633	1,659
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	453	591	591
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	407	527	527
American Indian/Alaska Native	ne	ne	ne	ne	ne	6	8	5
Asian/Pacific Islander	ne	ne	ne	ne	ne	11	21	17
Black, non-Hispanic	ne	ne	ne	ne	ne	50	52	77
Hispanic	ne	ne	ne	ne	ne	16	23	29
White, non-Hispanic	ne	ne	ne	ne	ne	297	381	366
Other or unknown	ne	ne	ne	ne	ne	27	42	33
Temporary visa holders	ne	ne	ne	ne	ne	46	64	64
Mathematical sciences	12,176	12,434	12,773	13,122	13,554	13,297	13,649	14,247
U.S. citizens and permanent residents	7,524	7,732	8,028	8,362	8,639	8,502	8,512	9,051
American Indian/Alaska Native	18	26	23	37	33	31	40	31
Asian/Pacific Islander	739	714	761	784	787	764	761	812
Black, non-Hispanic	373	364	369	364	380	379	370	409
Hispanic	381	395	418	449	495	490	467	523
White, non-Hispanic	5,353	5,566	5,738	5,941	6,053	5,967	6,025	6,378
Other or unknown	660	667	719	787	891	871	849	898
Temporary visa holders	4,652	4,702	4,745	4,760	4,915	4,795	5,137	5,196
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	1,924	2,325	2,748
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	1,577	1,872	2,245
American Indian/Alaska Native	ne	ne	ne	ne	ne	13	14	16
Asian/Pacific Islander	ne	ne	ne	ne	ne	101	104	123
Black, non-Hispanic	ne	ne	ne	ne	ne	101	124	154
Hispanic	ne	ne	ne	ne	ne	84	130	148
White, non-Hispanic	ne	ne	ne	ne	ne	1,079	1,248	1,468
Other or unknown	ne	ne	ne	ne	ne	199	252	336
Temporary visa holders	ne	ne	ne	ne	ne	347	453	503
Neuroscience ^a	na	na	na	na	na	721	915	1,092
U.S. citizens and permanent residents	na	na	na	na	na	566	737	911
American Indian/Alaska Native	na	na	na	na	na	3	7	9
Asian/Pacific Islander	na	na	na	na	na	61	77	109
Black, non-Hispanic	na	na	na	na	na	26	31	36
Hispanic	na	na	na	na	na	32	38	54
White, non-Hispanic	na	na	na	na	na	411	528	612
Other or unknown	na	na	na	na	na	33	56	91
Temporary visa holders	na	na	na	na	na	155	178	181

TABLE 31. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Physical sciences	23,520	24,461	24,649	24,896	24,858	24,715	24,986	25,458
U.S. citizens and permanent residents	13,666	14,391	14,577	14,774	15,031	14,928	15,108	15,400
American Indian/Alaska Native	54	50	48	69	56	55	61	71
Asian/Pacific Islander	946	1,019	961	1,022	1,068	1,064	1,027	1,080
Black, non-Hispanic	508	540	524	503	483	482	518	486
Hispanic	678	744	752	766	761	761	774	787
White, non-Hispanic	10,515	11,008	11,297	11,233	11,453	11,366	11,418	11,681
Other or unknown	965	1,030	995	1,181	1,210	1,200	1,310	1,295
Temporary visa holders	9,854	10,070	10,072	10,122	9,827	9,787	9,878	10,058
Psychology	13,383	13,970	13,963	13,950	14,690	14,501	14,376	13,648
U.S. citizens and permanent residents	12,229	12,722	13,056	13,154	13,843	13,684	13,523	12,837
American Indian/Alaska Native	95	88	91	83	95	93	100	97
Asian/Pacific Islander	575	563	561	575	654	643	631	593
Black, non-Hispanic	934	1,238	947	925	942	935	1,017	953
Hispanic	1,130	1,132	1,174	1,192	1,310	1,302	1,272	1,151
White, non-Hispanic	8,680	8,560	8,745	8,913	9,388	9,282	9,033	8,696
Other or unknown	815	1,141	1,538	1,466	1,454	1,429	1,470	1,347
Temporary visa holders	1,154	1,248	907	796	847	817	853	811
Social sciences	44,428	45,448	46,159	47,320	48,430	47,697	47,684	50,071
U.S. citizens and permanent residents	34,306	35,360	36,312	37,158	38,572	37,986	37,578	40,073
American Indian/Alaska Native	279	258	299	284	287	285	357	329
Asian/Pacific Islander	1,751	1,852	1,894	1,835	1,996	1,961	1,908	2,059
Black, non-Hispanic	3,160	3,132	3,158	3,275	3,441	3,379	3,356	3,530
Hispanic	2,564	2,641	2,865	2,922	3,002	2,964	2,889	3,127
White, non-Hispanic	23,564	24,041	24,236	24,746	25,398	25,017	24,813	26,450
Other or unknown	2,988	3,436	3,860	4,096	4,448	4,380	4,255	4,578
Temporary visa holders	10,122	10,088	9,847	10,162	9,858	9,711	10,106	9,998
Engineering	99,790	96,294	93,670	95,097	100,281	101,204	106,319	111,359
U.S. citizens and permanent residents	51,878	51,134	51,271	52,232	54,007	54,599	57,255	60,748
American Indian/Alaska Native	219	198	206	218	224	225	249	266
Asian/Pacific Islander	7,585	6,752	6,729	6,583	6,849	6,928	7,081	7,244
Black, non-Hispanic	2,171	2,270	2,370	2,443	2,473	2,521	2,703	2,857
Hispanic	2,922	3,065	2,993	3,186	3,275	3,307	3,466	3,867
White, non-Hispanic	34,577	34,377	34,181	34,292	35,240	35,610	37,521	39,791
Other or unknown	4,404	4,472	4,792	5,510	5,946	6,008	6,235	6,723
Temporary visa holders	47,912	45,160	42,399	42,865	46,274	46,605	49,064	50,611
Aerospace engineering	3,445	3,489	3,563	3,773	3,916	3,916	4,180	4,532
U.S. citizens and permanent residents	1,971	2,024	2,128	2,505	2,604	2,604	2,824	3,108
American Indian/Alaska Native	11	13	11	9	9	9	11	11
Asian/Pacific Islander	171	161	189	250	284	284	300	319
Black, non-Hispanic	50	54	58	61	60	60	79	88
Hispanic	93	96	100	112	123	123	134	170
White, non-Hispanic	1,468	1,535	1,572	1,643	1,814	1,814	1,948	2,153
Other or unknown	178	165	198	430	314	314	352	367
Temporary visa holders	1,474	1,465	1,435	1,268	1,312	1,312	1,356	1,424
Agricultural engineering	743	730	736	723	760	760	835	866
U.S. citizens and permanent residents	377	373	361	341	370	370	400	432
American Indian/Alaska Native	0	1	2	2	1	1	1	0
Asian/Pacific Islander	20	31	23	23	20	20	17	13
Black, non-Hispanic	14	9	13	14	12	12	11	18
Hispanic	6	4	3	4	9	9	15	18
White, non-Hispanic	322	320	305	285	309	309	341	361
Other or unknown	15	8	15	13	19	19	15	22
Temporary visa holders	366	357	375	382	390	390	435	434

TABLE 31. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Architecture ^a	na	na	na	na	na	2,627	3,293	3,807
U.S. citizens and permanent residents	na	na	na	na	na	2,140	2,755	3,243
American Indian/Alaska Native	na	na	na	na	na	12	16	19
Asian/Pacific Islander	na	na	na	na	na	108	138	148
Black, non-Hispanic	na	na	na	na	na	125	156	177
Hispanic	na	na	na	na	na	122	215	263
White, non-Hispanic	na	na	na	na	na	1,613	2,014	2,343
Other or unknown	na	na	na	na	na	160	216	293
Temporary visa holders	na	na	na	na	na	487	538	564
Biomedical engineering	3,357	3,624	3,770	3,996	4,271	4,283	4,578	4,925
U.S. citizens and permanent residents	2,091	2,240	2,365	2,596	2,749	2,757	2,967	3,254
American Indian/Alaska Native	4	10	7	13	14	14	14	13
Asian/Pacific Islander	385	431	451	504	550	551	558	688
Black, non-Hispanic	68	78	89	97	89	89	106	106
Hispanic	98	116	117	140	156	156	135	191
White, non-Hispanic	1,371	1,446	1,513	1,635	1,655	1,662	1,874	2,001
Other or unknown	165	159	188	207	285	285	280	255
Temporary visa holders	1,266	1,384	1,405	1,400	1,522	1,526	1,611	1,671
Chemical engineering	5,416	5,346	5,094	5,102	5,148	5,318	5,483	5,572
U.S. citizens and permanent residents	2,649	2,631	2,566	2,568	2,542	2,615	2,678	2,816
American Indian/Alaska Native	13	14	17	15	14	14	12	12
Asian/Pacific Islander	342	276	287	290	276	281	289	320
Black, non-Hispanic	95	95	86	93	99	103	99	106
Hispanic	143	132	130	154	154	155	148	139
White, non-Hispanic	1,919	1,990	1,897	1,885	1,845	1,909	1,956	2,049
Other or unknown	137	124	149	131	154	153	174	190
Temporary visa holders	2,767	2,715	2,528	2,534	2,606	2,703	2,805	2,756
Civil engineering ^a	13,492	13,120	12,709	12,379	13,519	11,335	12,166	13,337
U.S. citizens and permanent residents	7,906	7,874	7,817	7,762	8,649	6,855	7,408	8,327
American Indian/Alaska Native	42	35	38	43	54	43	34	41
Asian/Pacific Islander	658	622	606	588	648	562	613	746
Black, non-Hispanic	273	291	295	327	372	283	307	323
Hispanic	564	616	603	636	664	565	533	613
White, non-Hispanic	5,834	5,772	5,672	5,511	6,154	4,786	5,246	5,729
Other or unknown	535	538	603	657	757	616	675	875
Temporary visa holders	5,586	5,246	4,892	4,617	4,870	4,480	4,758	5,010
Electrical engineering	33,969	31,794	30,662	31,239	32,840	33,149	33,824	34,044
U.S. citizens and permanent residents	15,156	14,290	14,116	13,851	13,577	13,783	13,923	13,922
American Indian/Alaska Native	49	43	47	42	45	45	57	48
Asian/Pacific Islander	3,442	2,843	2,832	2,700	2,493	2,540	2,556	2,485
Black, non-Hispanic	629	656	654	648	662	678	692	728
Hispanic	890	913	882	865	818	832	848	919
White, non-Hispanic	8,673	8,476	8,243	7,969	7,879	7,994	7,862	8,058
Other or unknown	1,473	1,359	1,458	1,627	1,680	1,694	1,908	1,684
Temporary visa holders	18,813	17,504	16,546	17,388	19,263	19,366	19,901	20,122
Engineering science	1,775	1,733	1,532	1,595	1,431	1,397	1,628	1,690
U.S. citizens and permanent residents	995	933	861	920	813	781	972	992
American Indian/Alaska Native	7	6	5	6	5	4	4	5
Asian/Pacific Islander	116	120	102	114	112	104	113	107
Black, non-Hispanic	36	26	26	33	21	21	30	39
Hispanic	44	39	36	43	30	26	51	53
White, non-Hispanic	749	692	641	662	585	574	664	673
Other or unknown	43	50	51	62	60	52	110	115
Temporary visa holders	780	800	671	675	618	616	656	698

TABLE 31. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Industrial engineering	11,047	10,622	10,354	10,363	10,770	10,930	11,978	12,025
U.S. citizens and permanent residents	6,563	6,530	6,843	6,923	6,732	6,799	7,211	7,329
American Indian/Alaska Native	37	37	35	38	32	32	33	47
Asian/Pacific Islander	717	656	735	715	725	755	780	718
Black, non-Hispanic	419	441	482	467	451	443	545	543
Hispanic	383	418	392	450	451	452	502	496
White, non-Hispanic	4,357	4,223	4,440	4,338	4,120	4,122	4,360	4,218
Other or unknown	650	755	759	915	953	995	991	1,307
Temporary visa holders	4,484	4,092	3,511	3,440	4,038	4,131	4,767	4,696
Mechanical engineering	16,039	15,396	14,965	15,434	15,751	15,733	16,836	18,253
U.S. citizens and permanent residents	8,239	8,289	8,313	8,707	8,898	8,885	9,428	10,184
American Indian/Alaska Native	35	18	21	28	27	27	31	38
Asian/Pacific Islander	823	778	752	744	980	981	1,019	981
Black, non-Hispanic	296	278	321	344	316	315	326	337
Hispanic	441	452	467	504	524	527	567	628
White, non-Hispanic	5,979	6,074	6,036	6,367	6,265	6,247	6,581	7,248
Other or unknown	665	689	716	720	786	788	904	952
Temporary visa holders	7,800	7,107	6,652	6,727	6,853	6,848	7,408	8,069
Metallurgical/materials engineering	3,800	3,738	3,812	3,878	3,905	3,841	4,006	4,274
U.S. citizens and permanent residents	1,844	1,811	1,830	1,959	1,973	1,950	2,021	2,166
American Indian/Alaska Native	6	6	5	4	6	6	10	8
Asian/Pacific Islander	217	250	219	238	215	213	217	226
Black, non-Hispanic	59	57	53	68	72	69	67	64
Hispanic	60	68	74	64	78	77	74	103
White, non-Hispanic	1,427	1,326	1,377	1,443	1,431	1,405	1,491	1,619
Other or unknown	75	104	102	142	171	180	162	146
Temporary visa holders	1,956	1,927	1,982	1,919	1,932	1,891	1,985	2,108
Mining engineering	236	266	240	201	256	185	241	257
U.S. citizens and permanent residents	137	156	131	102	154	108	141	166
American Indian/Alaska Native	3	1	0	1	0	0	3	1
Asian/Pacific Islander	3	5	4	1	10	8	4	8
Black, non-Hispanic	2	5	3	3	6	0	2	5
Hispanic	3	5	5	5	4	4	9	8
White, non-Hispanic	111	132	99	82	125	89	114	133
Other or unknown	15	8	20	10	9	7	9	11
Temporary visa holders	99	110	109	99	102	77	100	91
Nuclear engineering	703	775	802	885	982	959	987	1,045
U.S. citizens and permanent residents	417	493	531	634	767	751	768	810
American Indian/Alaska Native	1	3	3	2	2	2	4	4
Asian/Pacific Islander	21	28	31	33	41	41	47	44
Black, non-Hispanic	4	8	8	10	11	11	14	12
Hispanic	24	21	28	53	40	39	37	37
White, non-Hispanic	352	408	438	493	586	572	614	655
Other or unknown	15	25	23	43	87	86	52	58
Temporary visa holders	286	282	271	251	215	208	219	235
Petroleum engineering	720	711	687	678	831	831	818	981
U.S. citizens and permanent residents	150	161	164	161	221	221	177	207
American Indian/Alaska Native	0	0	0	0	0	0	1	1
Asian/Pacific Islander	9	17	19	13	15	15	16	22
Black, non-Hispanic	10	17	27	21	36	36	23	17
Hispanic	7	9	11	15	24	24	14	15
White, non-Hispanic	113	109	100	98	132	132	113	146
Other or unknown	11	9	7	14	14	14	10	6
Temporary visa holders	570	550	523	517	610	610	641	774

TABLE 31. Male graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Engineering, nec	5,048	4,950	4,744	4,851	5,901	5,940	5,466	5,751
U.S. citizens and permanent residents	3,383	3,329	3,245	3,203	3,958	3,980	3,582	3,792
American Indian/Alaska Native	11	11	15	15	15	16	18	18
Asian/Pacific Islander	661	534	479	370	480	465	414	419
Black, non-Hispanic	216	255	255	257	266	276	246	294
Hispanic	166	176	145	141	200	196	184	214
White, non-Hispanic	1,902	1,874	1,848	1,881	2,340	2,382	2,343	2,405
Other or unknown	427	479	503	539	657	645	377	442
Temporary visa holders	1,665	1,621	1,499	1,648	1,943	1,960	1,884	1,959
Health ^a	22,434	22,706	23,324	24,637	24,072	23,083	23,032	20,589
U.S. citizens and permanent residents	18,840	19,367	19,801	20,801	20,227	19,343	19,132	16,619
American Indian/Alaska Native	127	111	89	117	125	122	153	114
Asian/Pacific Islander	1,937	1,925	1,963	2,090	2,006	1,899	1,720	1,593
Black, non-Hispanic	1,302	1,380	1,493	1,670	1,466	1,435	1,478	1,356
Hispanic	1,275	1,373	1,355	1,380	1,333	1,282	1,196	1,166
White, non-Hispanic	12,952	13,043	13,038	13,738	13,545	13,045	12,890	10,968
Other or unknown	1,247	1,535	1,863	1,806	1,752	1,560	1,695	1,422
Temporary visa holders	3,594	3,339	3,523	3,836	3,845	3,740	3,900	3,970

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 32. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	268,439	277,749	286,935	297,825	299,671	307,490	311,179	303,120
U.S. citizens and permanent residents	218,447	227,554	237,029	246,041	245,526	252,309	252,329	242,387
American Indian/Alaska Native	1,382	1,396	1,488	1,593	1,651	1,713	1,946	1,749
Asian/Pacific Islander	18,255	18,870	19,112	19,360	19,487	19,748	19,335	19,270
Black, non-Hispanic	20,484	21,339	22,429	23,416	23,274	24,013	24,595	24,539
Hispanic	15,227	16,067	17,035	17,829	18,106	18,527	18,379	18,140
White, non-Hispanic	148,159	152,593	156,051	162,059	160,001	164,684	163,522	155,553
Other or unknown	14,940	17,289	20,914	21,784	23,007	23,624	24,552	23,136
Temporary visa holders	49,992	50,195	49,906	51,784	54,145	55,181	58,850	60,733
Science and engineering	198,397	201,865	206,308	211,106	218,295	227,273	231,997	237,749
U.S. citizens and permanent residents	152,363	155,725	160,613	163,820	168,644	176,449	177,792	181,700
American Indian/Alaska Native	989	1,001	1,050	1,133	1,167	1,235	1,431	1,370
Asian/Pacific Islander	13,823	13,705	13,885	13,766	14,376	14,762	14,527	15,082
Black, non-Hispanic	14,718	14,847	15,623	15,884	16,371	17,162	17,706	18,519
Hispanic	11,059	11,621	12,468	12,839	13,361	13,848	14,025	14,235
White, non-Hispanic	100,544	101,912	102,589	104,515	106,672	111,932	112,046	114,287
Other or unknown	11,230	12,639	14,998	15,683	16,697	17,510	18,057	18,207
Temporary visa holders	46,034	46,140	45,695	47,286	49,651	50,824	54,205	56,049
Science	170,810	174,593	179,413	183,162	188,321	196,801	200,460	204,431
U.S. citizens and permanent residents	136,931	140,480	145,333	148,354	152,294	159,749	160,796	163,806
American Indian/Alaska Native	904	926	983	1,061	1,105	1,170	1,334	1,292
Asian/Pacific Islander	10,721	10,745	10,884	11,170	11,710	12,052	11,904	12,399
Black, non-Hispanic	13,677	13,718	14,523	14,755	15,160	15,908	16,423	17,204
Hispanic	10,002	10,522	11,371	11,644	12,119	12,592	12,775	12,884
White, non-Hispanic	91,652	93,054	93,902	95,514	97,161	102,213	101,981	103,682
Other or unknown	9,975	11,515	13,670	14,210	15,039	15,814	16,379	16,345
Temporary visa holders	33,879	34,113	34,080	34,808	36,027	37,052	39,664	40,625
Agricultural sciences	6,026	6,258	6,202	6,299	6,444	6,627	6,891	7,485
U.S. citizens and permanent residents	4,988	5,167	5,112	5,157	5,258	5,357	5,488	5,965
American Indian/Alaska Native	39	47	45	46	48	48	77	77
Asian/Pacific Islander	165	193	158	173	178	183	229	223
Black, non-Hispanic	266	241	245	301	283	282	289	244
Hispanic	239	257	263	277	301	316	322	373
White, non-Hispanic	4,061	4,191	4,146	4,070	4,136	4,220	4,184	4,602
Other or unknown	218	238	255	290	312	308	387	446
Temporary visa holders	1,038	1,091	1,090	1,142	1,186	1,270	1,403	1,520
Biological sciences	35,883	37,289	38,521	39,369	40,651	40,754	41,334	41,818
U.S. citizens and permanent residents	27,976	28,741	29,603	30,304	31,494	31,725	31,762	32,283
American Indian/Alaska Native	147	157	164	182	166	167	187	194
Asian/Pacific Islander	2,894	3,025	3,126	3,355	3,507	3,553	3,426	3,608
Black, non-Hispanic	1,899	2,033	2,063	2,123	2,261	2,271	2,301	2,456
Hispanic	1,612	1,741	1,826	1,926	2,074	2,070	2,093	2,254
White, non-Hispanic	19,749	20,022	20,415	20,772	21,115	21,136	21,173	21,086
Other or unknown	1,675	1,763	2,009	1,946	2,371	2,528	2,582	2,685
Temporary visa holders	7,907	8,548	8,918	9,065	9,157	9,029	9,572	9,535
Communication ^a	ne	ne	ne	ne	ne	4,647	5,381	6,029
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	3,927	4,517	4,991
American Indian/Alaska Native	ne	ne	ne	ne	ne	19	35	36
Asian/Pacific Islander	ne	ne	ne	ne	ne	165	195	237
Black, non-Hispanic	ne	ne	ne	ne	ne	375	436	459
Hispanic	ne	ne	ne	ne	ne	270	302	295
White, non-Hispanic	ne	ne	ne	ne	ne	2,733	3,060	3,490
Other or unknown	ne	ne	ne	ne	ne	365	489	474
Temporary visa holders	ne	ne	ne	ne	ne	720	864	1,038

TABLE 32. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Computer sciences	14,816	13,277	12,045	12,062	12,206	12,017	12,545	13,053
U.S. citizens and permanent residents	8,051	7,362	6,776	6,741	6,169	6,020	6,015	6,300
American Indian/Alaska Native	36	30	33	27	16	15	34	28
Asian/Pacific Islander	1,973	1,651	1,403	1,300	1,154	1,117	1,103	1,186
Black, non-Hispanic	823	708	714	722	704	695	708	799
Hispanic	286	283	272	271	286	282	287	293
White, non-Hispanic	4,039	3,849	3,621	3,581	3,091	3,012	3,064	3,192
Other or unknown	894	841	733	840	918	899	819	802
Temporary visa holders	6,765	5,915	5,269	5,321	6,037	5,997	6,530	6,753
Earth, atmospheric, and ocean sciences	6,538	6,932	6,895	7,004	6,951	6,650	6,621	6,815
U.S. citizens and permanent residents	5,493	5,854	5,796	5,898	5,853	5,593	5,477	5,717
American Indian/Alaska Native	33	27	31	26	35	31	35	29
Asian/Pacific Islander	197	227	213	216	220	196	200	228
Black, non-Hispanic	140	141	152	145	155	151	161	158
Hispanic	261	302	281	311	303	283	280	308
White, non-Hispanic	4,541	4,821	4,798	4,830	4,748	4,564	4,383	4,491
Other or unknown	321	336	321	370	392	368	418	503
Temporary visa holders	1,045	1,078	1,099	1,106	1,098	1,057	1,144	1,098
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	2,327	2,958	3,203
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	2,127	2,687	2,925
American Indian/Alaska Native	ne	ne	ne	ne	ne	17	14	18
Asian/Pacific Islander	ne	ne	ne	ne	ne	79	124	120
Black, non-Hispanic	ne	ne	ne	ne	ne	272	345	461
Hispanic	ne	ne	ne	ne	ne	71	112	129
White, non-Hispanic	ne	ne	ne	ne	ne	1,573	1,866	2,024
Other or unknown	ne	ne	ne	ne	ne	115	226	173
Temporary visa holders	ne	ne	ne	ne	ne	200	271	278
Mathematical sciences	7,289	7,497	7,437	7,693	7,781	7,678	7,751	7,979
U.S. citizens and permanent residents	4,533	4,792	4,740	4,857	4,969	4,930	4,723	4,860
American Indian/Alaska Native	7	13	15	22	14	14	18	16
Asian/Pacific Islander	625	584	611	629	631	623	599	645
Black, non-Hispanic	282	332	351	347	331	329	311	321
Hispanic	223	230	215	246	269	268	243	265
White, non-Hispanic	3,061	3,293	3,178	3,260	3,276	3,252	3,129	3,149
Other or unknown	335	340	370	353	448	444	423	464
Temporary visa holders	2,756	2,705	2,697	2,836	2,812	2,748	3,028	3,119
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,560	3,234	3,809
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	2,211	2,781	3,283
American Indian/Alaska Native	ne	ne	ne	ne	ne	39	41	38
Asian/Pacific Islander	ne	ne	ne	ne	ne	123	152	179
Black, non-Hispanic	ne	ne	ne	ne	ne	219	264	326
Hispanic	ne	ne	ne	ne	ne	169	230	253
White, non-Hispanic	ne	ne	ne	ne	ne	1,378	1,711	1,954
Other or unknown	ne	ne	ne	ne	ne	283	383	533
Temporary visa holders	ne	ne	ne	ne	ne	349	453	526
Neuroscience ^a	na	na	na	na	na	863	1,097	1,264
U.S. citizens and permanent residents	na	na	na	na	na	687	897	1,038
American Indian/Alaska Native	na	na	na	na	na	4	4	3
Asian/Pacific Islander	na	na	na	na	na	80	109	113
Black, non-Hispanic	na	na	na	na	na	35	36	52
Hispanic	na	na	na	na	na	49	62	64
White, non-Hispanic	na	na	na	na	na	482	625	714
Other or unknown	na	na	na	na	na	37	61	92
Temporary visa holders	na	na	na	na	na	176	200	226

TABLE 32. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Physical sciences	10,778	11,300	11,726	12,005	12,253	12,109	12,333	12,691
U.S. citizens and permanent residents	6,505	6,757	7,098	7,370	7,605	7,489	7,448	7,671
American Indian/Alaska Native	25	28	34	49	49	48	50	48
Asian/Pacific Islander	631	659	670	731	824	813	744	791
Black, non-Hispanic	431	453	482	506	501	498	491	493
Hispanic	416	489	490	490	509	503	494	495
White, non-Hispanic	4,592	4,718	5,002	5,092	5,175	5,085	5,102	5,252
Other or unknown	410	410	420	502	547	542	567	592
Temporary visa holders	4,273	4,543	4,628	4,635	4,648	4,620	4,885	5,020
Psychology	38,779	40,156	43,319	43,703	45,594	45,116	44,615	42,536
U.S. citizens and permanent residents	36,826	38,210	41,172	41,648	43,328	42,890	42,389	40,409
American Indian/Alaska Native	229	235	241	261	309	309	298	287
Asian/Pacific Islander	1,799	1,880	1,990	2,037	2,242	2,226	2,179	2,066
Black, non-Hispanic	3,758	3,752	4,291	4,164	4,198	4,165	4,341	4,440
Hispanic	3,547	3,659	3,927	4,030	4,216	4,204	4,271	3,852
White, non-Hispanic	24,872	25,020	25,614	26,132	27,588	27,237	26,497	25,646
Other or unknown	2,621	3,664	5,109	5,024	4,775	4,749	4,803	4,118
Temporary visa holders	1,953	1,946	2,147	2,055	2,266	2,226	2,226	2,127
Social sciences	50,701	51,884	53,268	55,027	56,441	55,453	55,700	57,749
U.S. citizens and permanent residents	42,559	43,597	45,036	46,379	47,618	46,793	46,612	48,364
American Indian/Alaska Native	388	389	420	448	468	459	541	518
Asian/Pacific Islander	2,437	2,526	2,713	2,729	2,954	2,894	2,844	3,003
Black, non-Hispanic	6,078	6,058	6,225	6,447	6,727	6,616	6,740	6,995
Hispanic	3,418	3,561	4,097	4,093	4,161	4,107	4,079	4,303
White, non-Hispanic	26,737	27,140	27,128	27,777	28,032	27,541	27,187	28,082
Other or unknown	3,501	3,923	4,453	4,885	5,276	5,176	5,221	5,463
Temporary visa holders	8,142	8,287	8,232	8,648	8,823	8,660	9,088	9,385
Engineering	27,587	27,272	26,895	27,944	29,974	30,472	31,537	33,318
U.S. citizens and permanent residents	15,432	15,245	15,280	15,466	16,350	16,700	16,996	17,894
American Indian/Alaska Native	85	75	67	72	62	65	97	78
Asian/Pacific Islander	3,102	2,960	3,001	2,596	2,666	2,710	2,623	2,683
Black, non-Hispanic	1,041	1,129	1,100	1,129	1,211	1,254	1,283	1,315
Hispanic	1,057	1,099	1,097	1,195	1,242	1,256	1,250	1,351
White, non-Hispanic	8,892	8,858	8,687	9,001	9,511	9,719	10,065	10,605
Other or unknown	1,255	1,124	1,328	1,473	1,658	1,696	1,678	1,862
Temporary visa holders	12,155	12,027	11,615	12,478	13,624	13,772	14,541	15,424
Aerospace engineering	603	600	607	709	700	700	722	734
U.S. citizens and permanent residents	390	377	400	493	486	486	487	497
American Indian/Alaska Native	4	3	2	1	4	4	7	5
Asian/Pacific Islander	36	51	62	62	62	62	66	58
Black, non-Hispanic	9	14	15	18	21	21	24	20
Hispanic	26	22	16	24	22	22	25	25
White, non-Hispanic	279	256	272	326	338	338	296	332
Other or unknown	36	31	33	62	39	39	69	57
Temporary visa holders	213	223	207	216	214	214	235	237
Agricultural engineering	315	311	323	350	366	366	398	437
U.S. citizens and permanent residents	191	183	177	183	172	172	166	198
American Indian/Alaska Native	2	0	1	3	1	1	1	1
Asian/Pacific Islander	16	16	14	11	14	14	10	11
Black, non-Hispanic	16	14	12	13	10	10	9	12
Hispanic	8	4	10	12	5	5	6	9
White, non-Hispanic	142	143	136	140	130	130	132	152
Other or unknown	7	6	4	4	12	12	8	13
Temporary visa holders	124	128	146	167	194	194	232	239

TABLE 32. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Architecture ^a	na	na	na	na	na	1,974	2,612	2,997
U.S. citizens and permanent residents	na	na	na	na	na	1,567	2,085	2,368
American Indian/Alaska Native	na	na	na	na	na	3	26	13
Asian/Pacific Islander	na	na	na	na	na	120	161	177
Black, non-Hispanic	na	na	na	na	na	94	126	123
Hispanic	na	na	na	na	na	86	170	191
White, non-Hispanic	na	na	na	na	na	1,117	1,403	1,625
Other or unknown	na	na	na	na	na	147	199	239
Temporary visa holders	na	na	na	na	na	407	527	629
Biomedical engineering	1,944	2,183	2,297	2,486	2,610	2,621	2,761	2,979
U.S. citizens and permanent residents	1,306	1,435	1,556	1,702	1,775	1,784	1,805	1,983
American Indian/Alaska Native	3	5	6	5	5	5	7	7
Asian/Pacific Islander	258	311	344	373	401	401	381	428
Black, non-Hispanic	88	113	103	107	117	117	118	139
Hispanic	57	64	75	97	86	86	91	110
White, non-Hispanic	792	868	911	991	991	1,000	1,058	1,141
Other or unknown	108	74	117	129	175	175	150	158
Temporary visa holders	638	748	741	784	835	837	956	996
Chemical engineering	2,100	2,106	2,079	2,159	2,235	2,266	2,409	2,616
U.S. citizens and permanent residents	1,087	1,122	1,109	1,117	1,105	1,129	1,143	1,206
American Indian/Alaska Native	6	13	7	5	2	2	3	2
Asian/Pacific Islander	198	177	206	206	199	204	205	216
Black, non-Hispanic	78	74	60	56	50	52	51	66
Hispanic	106	117	110	123	107	106	90	86
White, non-Hispanic	635	676	664	671	675	692	716	760
Other or unknown	64	65	62	56	72	73	78	76
Temporary visa holders	1,013	984	970	1,042	1,130	1,137	1,266	1,410
Civil engineering ^a	5,398	5,441	5,405	5,423	6,348	4,736	4,765	5,301
U.S. citizens and permanent residents	3,552	3,562	3,598	3,659	4,402	3,117	3,069	3,423
American Indian/Alaska Native	23	16	14	19	16	15	16	18
Asian/Pacific Islander	366	375	400	369	406	312	336	390
Black, non-Hispanic	155	162	161	181	231	178	168	205
Hispanic	282	282	293	331	404	327	263	302
White, non-Hispanic	2,499	2,498	2,467	2,460	2,961	2,021	2,019	2,155
Other or unknown	227	229	263	299	384	264	267	353
Temporary visa holders	1,846	1,879	1,807	1,764	1,946	1,619	1,696	1,878
Electrical engineering	7,794	7,201	6,788	7,026	7,367	7,439	7,340	7,174
U.S. citizens and permanent residents	2,962	2,588	2,546	2,315	2,182	2,241	2,119	2,014
American Indian/Alaska Native	14	11	7	4	2	3	4	6
Asian/Pacific Islander	1,164	980	930	714	606	624	571	556
Black, non-Hispanic	183	194	189	180	180	183	172	172
Hispanic	204	184	208	179	161	164	159	153
White, non-Hispanic	1,036	968	907	906	910	939	872	850
Other or unknown	361	251	305	332	323	328	341	277
Temporary visa holders	4,832	4,613	4,242	4,711	5,185	5,198	5,221	5,160
Engineering science	465	465	419	451	412	409	471	478
U.S. citizens and permanent residents	235	254	235	250	211	208	244	237
American Indian/Alaska Native	4	5	4	3	3	3	3	1
Asian/Pacific Islander	36	43	41	45	43	39	32	27
Black, non-Hispanic	6	12	10	11	7	7	12	12
Hispanic	5	6	7	3	5	6	12	16
White, non-Hispanic	179	173	152	168	134	135	163	148
Other or unknown	5	15	21	20	19	18	22	33
Temporary visa holders	230	211	184	201	201	201	227	241

TABLE 32. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Industrial engineering	3,266	3,230	3,296	3,466	3,520	3,544	3,714	3,800
U.S. citizens and permanent residents	2,257	2,233	2,228	2,326	2,288	2,291	2,253	2,182
American Indian/Alaska Native	15	11	16	17	14	15	18	14
Asian/Pacific Islander	281	273	291	295	307	313	289	259
Black, non-Hispanic	266	273	282	296	290	291	304	283
Hispanic	179	211	187	214	210	212	201	221
White, non-Hispanic	1,323	1,261	1,218	1,248	1,180	1,171	1,183	1,087
Other or unknown	193	204	234	256	287	289	258	318
Temporary visa holders	1,009	997	1,068	1,140	1,232	1,253	1,461	1,618
Mechanical engineering	2,354	2,456	2,408	2,485	2,615	2,614	2,749	2,990
U.S. citizens and permanent residents	1,363	1,435	1,406	1,498	1,597	1,596	1,647	1,709
American Indian/Alaska Native	7	6	7	4	6	6	6	5
Asian/Pacific Islander	171	195	210	196	262	262	261	244
Black, non-Hispanic	86	91	90	75	93	93	99	94
Hispanic	96	114	108	117	129	129	118	121
White, non-Hispanic	904	924	862	970	967	966	1,010	1,086
Other or unknown	99	105	129	136	140	140	153	159
Temporary visa holders	991	1,021	1,002	987	1,018	1,018	1,102	1,281
Metallurgical/materials engineering	1,331	1,321	1,348	1,390	1,460	1,473	1,533	1,589
U.S. citizens and permanent residents	702	690	688	731	766	769	775	783
American Indian/Alaska Native	2	0	0	4	3	3	3	3
Asian/Pacific Islander	99	96	96	99	126	125	142	136
Black, non-Hispanic	51	48	49	61	59	58	59	48
Hispanic	38	31	32	34	38	40	44	42
White, non-Hispanic	482	489	482	483	493	495	497	500
Other or unknown	30	26	29	50	47	48	30	54
Temporary visa holders	629	631	660	659	694	704	758	806
Mining engineering	42	42	39	43	51	37	49	55
U.S. citizens and permanent residents	30	33	30	27	29	22	24	31
American Indian/Alaska Native	1	0	0	0	0	0	0	0
Asian/Pacific Islander	2	1	2	0	0	0	3	2
Black, non-Hispanic	0	0	0	0	1	0	2	3
Hispanic	0	5	4	0	1	0	0	2
White, non-Hispanic	27	25	22	26	26	22	19	23
Other or unknown	0	2	2	1	1	0	0	1
Temporary visa holders	12	9	9	16	22	15	25	24
Nuclear engineering	182	196	211	214	226	221	214	198
U.S. citizens and permanent residents	115	123	143	146	157	153	165	148
American Indian/Alaska Native	0	0	0	0	0	0	0	0
Asian/Pacific Islander	9	14	16	12	7	7	13	14
Black, non-Hispanic	8	12	13	8	11	11	12	10
Hispanic	7	7	10	7	9	9	10	5
White, non-Hispanic	87	84	96	110	113	109	120	108
Other or unknown	4	6	8	9	17	17	10	11
Temporary visa holders	67	73	68	68	69	68	49	50
Petroleum engineering	129	134	121	135	183	183	191	209
U.S. citizens and permanent residents	24	33	28	34	37	37	40	45
American Indian/Alaska Native	0	0	0	0	0	0	0	0
Asian/Pacific Islander	3	7	2	2	2	2	4	3
Black, non-Hispanic	1	4	4	3	7	7	6	6
Hispanic	6	6	6	7	8	8	4	5
White, non-Hispanic	12	14	14	19	18	18	25	30
Other or unknown	2	2	2	3	2	2	1	1
Temporary visa holders	105	101	93	101	146	146	151	164

TABLE 32. Female graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Engineering, nec	1,664	1,586	1,554	1,607	1,881	1,889	1,609	1,761
U.S. citizens and permanent residents	1,218	1,177	1,136	985	1,143	1,128	974	1,070
American Indian/Alaska Native	4	5	3	7	6	5	3	3
Asian/Pacific Islander	463	421	387	212	231	225	149	162
Black, non-Hispanic	94	118	112	120	134	132	121	122
Hispanic	43	46	31	47	57	56	57	63
White, non-Hispanic	495	479	484	483	575	566	552	608
Other or unknown	119	108	119	116	140	144	92	112
Temporary visa holders	446	409	418	622	738	761	635	691
Health ^a	70,042	75,884	80,627	86,719	81,376	80,217	79,182	65,371
U.S. citizens and permanent residents	66,084	71,829	76,416	82,221	76,882	75,860	74,537	60,687
American Indian/Alaska Native	393	395	438	460	484	478	515	379
Asian/Pacific Islander	4,432	5,165	5,227	5,594	5,111	4,986	4,808	4,188
Black, non-Hispanic	5,766	6,492	6,806	7,532	6,903	6,851	6,889	6,020
Hispanic	4,168	4,446	4,567	4,990	4,745	4,679	4,354	3,905
White, non-Hispanic	47,615	50,681	53,462	57,544	53,329	52,752	51,476	41,266
Other or unknown	3,710	4,650	5,916	6,101	6,310	6,114	6,495	4,929
Temporary visa holders	3,958	4,055	4,211	4,498	4,494	4,357	4,645	4,684

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 33. Full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	397,420	402,573	406,620	419,015	430,860	437,365	449,613	456,115
Science and engineering	339,028	340,529	341,742	349,802	362,976	371,542	383,560	398,498
Science	248,812	253,574	257,283	261,984	269,821	277,229	285,305	293,561
Agricultural sciences	10,003	10,040	9,710	9,478	9,634	9,822	10,132	10,823
Biological sciences	54,350	55,848	57,697	58,918	60,093	60,428	60,662	61,466
Anatomy	829	802	844	899	906	823	731	806
Biochemistry	5,326	5,333	5,486	5,433	5,581	5,498	5,085	4,886
Biology	11,176	11,554	11,926	12,413	12,330	12,062	12,486	12,811
Biometry/epidemiology	3,208	3,218	3,417	3,495	3,734	3,919	4,294	4,176
Biophysics	968	1,115	1,120	1,145	1,183	1,159	1,037	1,001
Botany	1,730	1,653	1,667	1,655	1,713	1,655	1,613	1,664
Cell biology	5,220	5,395	5,770	6,188	6,317	6,445	6,632	6,660
Ecology	1,484	1,531	1,600	1,602	1,744	1,617	1,620	1,417
Entomology/parasitology	1,024	1,046	943	947	926	926	910	892
Genetics	1,983	2,047	2,063	2,060	2,067	2,042	2,056	2,175
Microbiology/immunology/virology	4,980	5,083	5,074	5,015	4,992	4,898	4,745	4,660
Nutrition	3,414	3,385	3,424	3,441	3,621	3,365	3,526	3,631
Pathology	1,319	1,367	1,375	1,400	1,406	1,386	1,384	1,308
Pharmacology	2,926	2,974	2,905	2,818	2,808	2,789	2,743	2,884
Physiology	2,165	2,219	2,187	2,195	2,164	2,455	2,606	2,597
Zoology	1,094	1,072	1,094	994	964	976	726	661
Biological sciences, nec	5,504	6,054	6,802	7,218	7,637	8,413	8,468	9,237
Communication ^a	ne	ne	ne	ne	ne	4,528	5,224	6,091
Computer sciences	30,708	29,162	28,317	28,760	30,511	30,082	31,338	32,198
Earth, atmospheric, and ocean sciences	11,497	11,685	11,370	11,431	11,376	10,892	11,171	11,589
Atmospheric sciences	1,019	963	1,002	930	959	1,011	1,169	1,132
Geosciences	5,574	5,712	5,537	5,497	5,473	5,423	5,409	5,825
Oceanography	2,259	2,284	2,198	2,231	2,177	2,144	2,120	2,197
Earth/atmospheric/ocean sciences, nec	2,645	2,726	2,633	2,773	2,767	2,314	2,473	2,435
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	1,594	1,936	2,168
Mathematical sciences	14,627	14,916	15,261	15,571	15,966	15,668	16,241	16,885
Mathematics/applied mathematics	11,622	11,915	12,051	12,348	12,587	12,279	12,530	12,950
Statistics	3,005	3,001	3,210	3,223	3,379	3,389	3,711	3,935
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,398	3,110	3,957
Neuroscience ^a	na	na	na	na	na	1,530	1,909	2,261
Physical sciences	30,441	31,675	32,400	32,841	33,091	32,857	33,254	34,181
Astronomy	1,023	1,078	1,129	1,158	1,186	1,185	1,233	1,348
Chemistry	17,694	18,311	18,760	18,942	19,001	18,887	19,073	19,682
Physics	11,430	12,017	12,224	12,439	12,596	12,570	12,626	12,771
Physical sciences, nec	294	269	287	302	308	215	322	380
Psychology	35,774	37,872	38,919	38,994	41,166	40,678	42,103	40,373
Clinical psychology	9,676	10,238	10,531	10,168	10,687	10,691	10,349	10,144
Psychology, general	11,416	11,689	12,016	12,148	12,824	12,550	12,925	11,443
Psychology, nec	14,682	15,945	16,372	16,678	17,655	17,437	18,829	18,786
Social sciences	61,412	62,376	63,609	65,991	67,984	66,752	68,225	71,569
Agricultural economics	2,043	1,888	1,831	1,836	1,856	1,762	1,868	1,896
Anthropology (cultural/social)	5,945	5,832	5,877	6,219	6,303	6,315	6,459	6,462
Economics (except agricultural)	10,018	10,037	9,715	10,018	10,181	10,358	10,541	11,433
Geography	3,145	3,172	3,196	3,158	3,166	3,166	3,299	3,331
History and philosophy of science	457	533	582	602	726	661	798	653
Linguistics	2,389	2,364	2,519	2,488	2,453	2,275	2,328	2,386

TABLE 33. Full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	19,963	21,101	22,222	23,109	23,473	23,209	23,640	25,970
Sociology	6,683	6,428	6,614	6,682	6,819	6,750	7,110	7,006
Sociology/anthropology	559	598	601	579	559	428	393	301
Social sciences, nec	10,210	10,423	10,452	11,300	12,448	11,828	11,789	12,131
Engineering	90,216	86,955	84,459	87,818	93,155	94,313	98,255	104,937
Aerospace engineering	3,243	3,243	3,241	3,374	3,482	3,482	3,691	3,974
Agricultural engineering	900	842	855	893	917	917	1,022	1,084
Architecture ^a	na	na	na	na	na	4,097	5,211	6,112
Biomedical engineering	4,717	5,047	5,254	5,666	5,898	5,921	6,262	6,859
Chemical engineering	6,414	6,379	6,139	6,218	6,275	6,459	6,762	7,110
Civil engineering ^a	13,710	13,588	13,196	13,074	14,691	11,336	11,909	13,503
Electrical engineering	28,929	26,732	25,849	27,379	28,934	29,076	29,212	29,282
Engineering science	1,770	1,741	1,613	1,656	1,454	1,432	1,486	1,490
Industrial engineering	7,098	6,591	6,113	6,421	7,036	7,422	8,216	8,362
Mechanical engineering	13,356	12,718	12,178	12,666	13,170	13,160	13,763	15,609
Metallurgical/materials engineering	4,386	4,359	4,507	4,627	4,667	4,613	4,811	5,181
Mining engineering	219	238	212	181	209	142	207	212
Nuclear engineering	752	809	840	910	960	951	941	968
Petroleum engineering	684	660	631	647	792	792	828	993
Engineering, nec	4,038	4,008	3,831	4,106	4,670	4,513	3,934	4,198
Health	58,392	62,044	64,878	69,213	67,884	65,823	66,053	57,617
Clinical medicine	14,742	14,999	15,102	16,567	17,451	15,478	16,965	16,725
Anesthesiology	1,001	1,098	1,120	1,189	826	826	562	400
Cardiology	30	39	33	32	51	51	38	38
Endocrinology	56	57	52	42	37	37	60	47
Gastroenterology	11	13	3	17	28	28	15	15
Hematology	25	24	9	14	9	9	8	9
Neurology ^a	2,573	2,561	2,684	2,885	3,283	1,707	1,416	1,284
Obstetrics/gynecology	20	13	16	47	71	71	65	69
Oncology/cancer research	232	270	329	340	355	264	260	258
Ophthalmology	393	406	380	389	385	378	1	1
Otorhinolaryngology	9	6	6	8	7	7	9	2
Pediatrics	349	327	225	245	267	267	169	162
Preventive medicine/community health	7,721	7,764	7,552	8,590	9,292	9,585	11,679	12,219
Psychiatry	77	200	117	126	153	93	95	114
Pulmonary disease	10	7	27	10	23	23	13	12
Radiology	208	171	189	184	213	224	225	271
Surgery	67	59	70	85	45	29	17	26
Clinical medicine, nec	1,960	1,984	2,290	2,364	2,406	1,879	2,333	1,798
Other health	43,650	47,045	49,776	52,646	50,433	50,345	49,088	40,892
Dental sciences	1,514	1,763	1,494	1,340	1,265	1,406	1,372	1,564
Nursing	10,832	11,598	12,571	13,979	13,137	13,128	13,204	9,544
Pharmaceutical sciences	3,515	3,633	4,255	4,480	3,756	3,852	2,979	3,182

TABLE 33. Full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	10,541	10,866	11,259	11,506	12,698	12,679	12,438	12,466
Veterinary sciences	1,391	1,364	1,532	1,663	1,634	1,891	1,860	1,637
Other health, nec	15,857	17,821	18,665	19,678	17,943	17,389	17,235	12,499

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 34. Male full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	214,041	212,830	211,845	216,816	224,012	226,198	232,451	240,564
Science and engineering	198,485	196,821	195,664	199,651	206,880	209,997	216,454	226,008
Science	128,345	129,685	130,677	132,515	135,892	138,285	141,825	146,490
Agricultural sciences	5,360	5,304	5,011	4,828	4,895	4,969	5,129	5,429
Biological sciences	24,684	24,950	25,598	26,203	26,464	26,639	26,638	26,948
Anatomy	408	394	433	449	439	414	365	391
Biochemistry	2,847	2,830	2,824	2,820	2,867	2,809	2,604	2,477
Biology	5,103	5,195	5,411	5,671	5,535	5,396	5,592	5,709
Biometry/epidemiology	1,164	1,190	1,229	1,292	1,429	1,540	1,710	1,728
Biophysics	647	706	732	758	772	750	669	643
Botany	817	766	783	785	814	787	755	776
Cell biology	2,509	2,568	2,734	2,865	2,892	2,943	2,997	2,993
Ecology	666	682	711	701	759	714	722	637
Entomology/parasitology	560	564	499	498	490	490	482	465
Genetics	826	814	804	802	830	813	816	861
Microbiology/immunology/virology	2,212	2,197	2,193	2,142	2,112	2,070	1,996	1,934
Nutrition	787	752	752	783	839	751	727	753
Pathology	544	563	546	549	545	539	533	499
Pharmacology	1,353	1,362	1,311	1,264	1,251	1,243	1,208	1,273
Physiology	1,104	1,084	1,028	1,031	1,010	1,140	1,241	1,287
Zoology	549	518	537	479	456	451	357	292
Biological sciences, nec	2,588	2,765	3,071	3,314	3,424	3,789	3,864	4,230
Communication ^a	ne	ne	ne	ne	ne	1,679	1,949	2,243
Computer sciences	22,858	21,962	21,689	21,953	23,152	22,843	23,746	24,232
Earth, atmospheric, and ocean sciences	6,314	6,329	6,106	6,037	5,953	5,719	5,978	6,227
Atmospheric sciences	682	642	657	606	615	647	780	759
Geosciences	3,283	3,313	3,174	3,093	3,064	3,030	3,060	3,330
Oceanography	1,096	1,069	1,054	1,044	997	982	974	1,012
Earth/atmospheric/ocean sciences, nec	1,253	1,305	1,221	1,294	1,277	1,060	1,164	1,126
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	271	325	354
Mathematical sciences	9,488	9,728	10,081	10,244	10,548	10,334	10,732	11,191
Mathematics/applied mathematics	7,957	8,156	8,339	8,499	8,698	8,477	8,681	8,965
Statistics	1,531	1,572	1,742	1,745	1,850	1,857	2,051	2,226
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	1,078	1,335	1,686
Neuroscience ^a	na	na	na	na	na	693	868	1,045
Physical sciences	21,014	21,790	22,060	22,328	22,309	22,188	22,378	22,970
Astronomy	692	733	756	765	786	785	836	944
Chemistry	10,852	11,128	11,336	11,389	11,266	11,195	11,215	11,565
Physics	9,286	9,775	9,816	10,017	10,088	10,069	10,113	10,204
Physical sciences, nec	184	154	152	157	169	139	214	257
Psychology	9,414	9,989	9,866	9,823	10,388	10,243	10,509	10,177
Clinical psychology	2,313	2,357	2,449	2,294	2,383	2,392	2,336	2,265
Psychology, general	3,442	3,675	3,556	3,538	3,651	3,589	3,643	3,381
Psychology, nec	3,659	3,957	3,861	3,991	4,354	4,262	4,530	4,531
Social sciences	29,213	29,633	30,266	31,099	32,183	31,629	32,238	33,988
Agricultural economics	1,231	1,150	1,068	1,054	1,060	1,008	1,062	1,052
Anthropology (cultural/social)	2,234	2,115	2,134	2,219	2,288	2,294	2,347	2,348
Economics (except agricultural)	6,395	6,397	6,250	6,488	6,459	6,538	6,657	7,261
Geography	1,774	1,850	1,822	1,791	1,802	1,802	1,866	1,838
History and philosophy of science	267	309	315	335	407	375	455	395
Linguistics	830	840	920	913	921	843	897	973

TABLE 34. Male full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	9,532	10,073	10,692	11,140	11,506	11,417	11,488	12,542
Sociology	2,391	2,270	2,430	2,456	2,501	2,486	2,618	2,660
Sociology/anthropology	199	195	199	202	183	137	139	112
Social sciences, nec	4,360	4,434	4,436	4,501	5,056	4,729	4,709	4,807
Engineering	70,140	67,136	64,987	67,136	70,988	71,712	74,629	79,518
Aerospace engineering	2,790	2,789	2,779	2,849	2,980	2,980	3,156	3,432
Agricultural engineering	621	577	583	591	603	603	675	717
Architecture ^a	na	na	na	na	na	2,341	2,909	3,433
Biomedical engineering	2,959	3,135	3,229	3,456	3,619	3,631	3,888	4,268
Chemical engineering	4,604	4,562	4,363	4,366	4,345	4,500	4,671	4,792
Civil engineering ^a	9,592	9,427	9,074	8,905	9,831	7,898	8,372	9,499
Electrical engineering	23,361	21,645	21,090	22,156	23,458	23,579	23,787	23,918
Engineering science	1,406	1,363	1,261	1,273	1,116	1,095	1,135	1,151
Industrial engineering	5,467	4,996	4,508	4,679	5,195	5,491	6,205	6,252
Mechanical engineering	11,608	10,947	10,446	10,876	11,256	11,247	11,763	13,326
Metallurgical/materials engineering	3,258	3,218	3,319	3,415	3,415	3,352	3,474	3,766
Mining engineering	187	208	183	148	173	118	170	170
Nuclear engineering	598	641	670	733	781	773	782	816
Petroleum engineering	568	540	527	541	646	646	677	820
Engineering, nec	3,121	3,088	2,955	3,148	3,570	3,458	2,965	3,158
Health	15,556	16,009	16,181	17,165	17,132	16,201	15,997	14,556
Clinical medicine	5,722	5,556	5,378	5,807	6,211	5,309	5,465	5,388
Anesthesiology	416	387	378	395	304	304	226	153
Cardiology	22	28	20	21	22	22	20	25
Endocrinology	29	20	24	21	14	14	16	17
Gastroenterology	1	6	1	8	14	14	8	7
Hematology	10	12	7	10	2	2	4	4
Neurology ^a	1,310	1,276	1,314	1,368	1,514	797	657	628
Obstetrics/gynecology	10	4	7	17	22	22	11	12
Oncology/cancer research	90	116	141	146	148	112	106	114
Ophthalmology	135	142	126	120	109	106	1	1
Otorhinolaryngology	7	5	4	3	3	3	3	1
Pediatrics	60	57	45	46	49	49	43	45
Preventive medicine/community health	2,513	2,397	2,144	2,515	2,770	2,858	3,241	3,367
Psychiatry	24	48	33	31	25	22	25	30
Pulmonary disease	5	1	14	6	15	15	7	4
Radiology	130	105	106	104	149	159	165	190
Surgery	50	41	49	54	24	18	9	12
Clinical medicine, nec	910	911	965	942	1,027	792	923	778
Other health	9,834	10,453	10,803	11,358	10,921	10,892	10,532	9,168
Dental sciences	918	1,010	833	782	743	817	816	910
Nursing	1,445	1,398	1,422	1,617	1,478	1,471	1,402	1,009
Pharmaceutical sciences	1,667	1,690	1,945	2,029	1,780	1,826	1,489	1,611
Speech pathology/audiology	663	675	655	710	932	918	927	873
Veterinary sciences	539	540	566	609	554	654	631	623
Other health, nec	4,602	5,140	5,382	5,611	5,434	5,206	5,267	4,142

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science field "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 35. Female full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	183,379	189,743	194,775	202,199	206,848	211,167	217,162	215,551
Science and engineering	140,543	143,708	146,078	150,151	156,096	161,545	167,106	172,490
Science	120,467	123,889	126,606	129,469	133,929	138,944	143,480	147,071
Agricultural sciences	4,643	4,736	4,699	4,650	4,739	4,853	5,003	5,394
Biological sciences	29,666	30,898	32,099	32,715	33,629	33,789	34,024	34,518
Anatomy	421	408	411	450	467	409	366	415
Biochemistry	2,479	2,503	2,662	2,613	2,714	2,689	2,481	2,409
Biology	6,073	6,359	6,515	6,742	6,795	6,666	6,894	7,102
Biometry/epidemiology	2,044	2,028	2,188	2,203	2,305	2,379	2,584	2,448
Biophysics	321	409	388	387	411	409	368	358
Botany	913	887	884	870	899	868	858	888
Cell biology	2,711	2,827	3,036	3,323	3,425	3,502	3,635	3,667
Ecology	818	849	889	901	985	903	898	780
Entomology/parasitology	464	482	444	449	436	436	428	427
Genetics	1,157	1,233	1,259	1,258	1,237	1,229	1,240	1,314
Microbiology/immunology/virology	2,768	2,886	2,881	2,873	2,880	2,828	2,749	2,726
Nutrition	2,627	2,633	2,672	2,658	2,782	2,614	2,799	2,878
Pathology	775	804	829	851	861	847	851	809
Pharmacology	1,573	1,612	1,594	1,554	1,557	1,546	1,535	1,611
Physiology	1,061	1,135	1,159	1,164	1,154	1,315	1,365	1,310
Zoology	545	554	557	515	508	525	369	369
Biological sciences, nec	2,916	3,289	3,731	3,904	4,213	4,624	4,604	5,007
Communication ^a	ne	ne	ne	ne	ne	2,849	3,275	3,848
Computer sciences	7,850	7,200	6,628	6,807	7,359	7,239	7,592	7,966
Earth, atmospheric, and ocean sciences	5,183	5,356	5,264	5,394	5,423	5,173	5,193	5,362
Atmospheric sciences	337	321	345	324	344	364	389	373
Geosciences	2,291	2,399	2,363	2,404	2,409	2,393	2,349	2,495
Oceanography	1,163	1,215	1,144	1,187	1,180	1,162	1,146	1,185
Earth/atmospheric/ocean sciences, nec	1,392	1,421	1,412	1,479	1,490	1,254	1,309	1,309
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	1,323	1,611	1,814
Mathematical sciences	5,139	5,188	5,180	5,327	5,418	5,334	5,509	5,694
Mathematics/applied mathematics	3,665	3,759	3,712	3,849	3,889	3,802	3,849	3,985
Statistics	1,474	1,429	1,468	1,478	1,529	1,532	1,660	1,709
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	1,320	1,775	2,271
Neuroscience ^a	na	na	na	na	na	837	1,041	1,216
Physical sciences	9,427	9,885	10,340	10,513	10,782	10,669	10,876	11,211
Astronomy	331	345	373	393	400	400	397	404
Chemistry	6,842	7,183	7,424	7,553	7,735	7,692	7,858	8,117
Physics	2,144	2,242	2,408	2,422	2,508	2,501	2,513	2,567
Physical sciences, nec	110	115	135	145	139	76	108	123
Psychology	26,360	27,883	29,053	29,171	30,778	30,435	31,594	30,196
Clinical psychology	7,363	7,881	8,082	7,874	8,304	8,299	8,013	7,879
Psychology, general	7,974	8,014	8,460	8,610	9,173	8,961	9,282	8,062
Psychology, nec	11,023	11,988	12,511	12,687	13,301	13,175	14,299	14,255
Social sciences	32,199	32,743	33,343	34,892	35,801	35,123	35,987	37,581
Agricultural economics	812	738	763	782	796	754	806	844
Anthropology (cultural/social)	3,711	3,717	3,743	4,000	4,015	4,021	4,112	4,114
Economics (except agricultural)	3,623	3,640	3,465	3,530	3,722	3,820	3,884	4,172
Geography	1,371	1,322	1,374	1,367	1,364	1,364	1,433	1,493
History and philosophy of science	190	224	267	267	319	286	343	258
Linguistics	1,559	1,524	1,599	1,575	1,532	1,432	1,431	1,413

TABLE 35. Female full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	10,431	11,028	11,530	11,969	11,967	11,792	12,152	13,428
Sociology	4,292	4,158	4,184	4,226	4,318	4,264	4,492	4,346
Sociology/anthropology	360	403	402	377	376	291	254	189
Social sciences, nec	5,850	5,989	6,016	6,799	7,392	7,099	7,080	7,324
Engineering	20,076	19,819	19,472	20,682	22,167	22,601	23,626	25,419
Aerospace engineering	453	454	462	525	502	502	535	542
Agricultural engineering	279	265	272	302	314	314	347	367
Architecture ^a	na	na	na	na	na	1,756	2,302	2,679
Biomedical engineering	1,758	1,912	2,025	2,210	2,279	2,290	2,374	2,591
Chemical engineering	1,810	1,817	1,776	1,852	1,930	1,959	2,091	2,318
Civil engineering ^a	4,118	4,161	4,122	4,169	4,860	3,438	3,537	4,004
Electrical engineering	5,568	5,087	4,759	5,223	5,476	5,497	5,425	5,364
Engineering science	364	378	352	383	338	337	351	339
Industrial engineering	1,631	1,595	1,605	1,742	1,841	1,931	2,011	2,110
Mechanical engineering	1,748	1,771	1,732	1,790	1,914	1,913	2,000	2,283
Metallurgical/materials engineering	1,128	1,141	1,188	1,212	1,252	1,261	1,337	1,415
Mining engineering	32	30	29	33	36	24	37	42
Nuclear engineering	154	168	170	177	179	178	159	152
Petroleum engineering	116	120	104	106	146	146	151	173
Engineering, nec	917	920	876	958	1,100	1,055	969	1,040
Health	42,836	46,035	48,697	52,048	50,752	49,622	50,056	43,061
Clinical medicine	9,020	9,443	9,724	10,760	11,240	10,169	11,500	11,337
Anesthesiology	585	711	742	794	522	522	336	247
Cardiology	8	11	13	11	29	29	18	13
Endocrinology	27	37	28	21	23	23	44	30
Gastroenterology	10	7	2	9	14	14	7	8
Hematology	15	12	2	4	7	7	4	5
Neurology ^a	1,263	1,285	1,370	1,517	1,769	910	759	656
Obstetrics/gynecology	10	9	9	30	49	49	54	57
Oncology/cancer research	142	154	188	194	207	152	154	144
Ophthalmology	258	264	254	269	276	272	0	0
Otorhinolaryngology	2	1	2	5	4	4	6	1
Pediatrics	289	270	180	199	218	218	126	117
Preventive medicine/community health	5,208	5,367	5,408	6,075	6,522	6,727	8,438	8,852
Psychiatry	53	152	84	95	128	71	70	84
Pulmonary disease	5	6	13	4	8	8	6	8
Radiology	78	66	83	80	64	65	60	81
Surgery	17	18	21	31	21	11	8	14
Clinical medicine, nec	1,050	1,073	1,325	1,422	1,379	1,087	1,410	1,020
Other health	33,816	36,592	38,973	41,288	39,512	39,453	38,556	31,724
Dental sciences	596	753	661	558	522	589	556	654
Nursing	9,387	10,200	11,149	12,362	11,659	11,657	11,802	8,535
Pharmaceutical sciences	1,848	1,943	2,310	2,451	1,976	2,026	1,490	1,571

TABLE 35. Female full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	9,878	10,191	10,604	10,796	11,766	11,761	11,511	11,593
Veterinary sciences	852	824	966	1,054	1,080	1,237	1,229	1,014
Other health, nec	11,255	12,681	13,283	14,067	12,509	12,183	11,968	8,357

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 36. Full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	132,353	129,337	127,345	131,331	136,304	137,649	144,701	148,923
Science and engineering	126,173	123,184	120,900	124,464	129,633	131,223	137,869	141,995
Science	75,188	75,111	75,293	76,980	78,654	79,756	84,163	85,703
Agricultural sciences	2,350	2,427	2,406	2,381	2,446	2,592	2,719	2,791
Biological sciences	13,789	14,646	15,312	15,661	15,568	15,343	16,056	15,918
Anatomy	190	170	180	210	189	175	165	166
Biochemistry	1,845	1,927	2,012	1,996	1,834	1,794	1,813	1,671
Biology	2,292	2,493	2,724	2,873	3,065	2,978	3,130	3,108
Biometry/epidemiology	1,029	1,006	1,005	1,027	1,093	1,171	1,172	1,244
Biophysics	310	362	369	377	376	357	333	309
Botany	558	565	632	661	673	658	655	672
Cell biology	1,329	1,533	1,614	1,762	1,768	1,795	1,928	1,881
Ecology	221	228	208	221	228	200	215	192
Entomology/parasitology	271	285	270	271	227	227	242	255
Genetics	503	552	569	587	575	548	611	589
Microbiology/immunology/virology	1,122	1,196	1,186	1,067	1,035	1,011	1,009	968
Nutrition	1,045	1,008	1,005	1,006	987	866	946	841
Pathology	318	300	317	308	272	254	325	297
Pharmacology	741	776	822	719	740	733	768	808
Physiology	503	478	445	445	387	415	539	543
Zoology	162	173	186	172	152	153	129	119
Biological sciences, nec	1,350	1,594	1,768	1,959	1,967	2,008	2,076	2,255
Communication ^a	ne	ne	ne	ne	ne	979	1,166	1,334
Computer sciences	17,964	16,443	16,091	16,801	18,474	18,268	19,654	20,085
Earth, atmospheric, and ocean sciences	2,521	2,563	2,499	2,507	2,450	2,345	2,503	2,529
Atmospheric sciences	275	257	277	234	238	260	299	284
Geosciences	1,315	1,328	1,281	1,305	1,298	1,248	1,260	1,375
Oceanography	465	480	464	478	410	404	437	441
Earth/atmospheric/ocean sciences, nec	466	498	477	490	504	433	507	429
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	198	277	277
Mathematical sciences	6,704	6,691	6,727	6,822	6,903	6,725	7,299	7,602
Mathematics/applied mathematics	4,868	4,877	4,815	4,862	4,893	4,719	5,030	5,213
Statistics	1,836	1,814	1,912	1,960	2,010	2,006	2,269	2,389
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	568	766	870
Neuroscience ^a	na	na	na	na	na	327	365	397
Physical sciences	13,248	13,597	13,805	13,862	13,631	13,569	13,894	14,185
Astronomy	317	361	356	363	377	377	396	427
Chemistry	7,313	7,476	7,673	7,712	7,587	7,539	7,844	8,006
Physics	5,540	5,704	5,712	5,707	5,636	5,629	5,599	5,686
Physical sciences, nec	78	56	64	80	31	24	55	66
Psychology	2,458	2,661	2,484	2,364	2,616	2,544	2,561	2,492
Clinical psychology	422	343	404	359	413	412	350	341
Psychology, general	979	1,254	993	861	955	936	966	911
Psychology, nec	1,057	1,064	1,087	1,144	1,248	1,196	1,245	1,240
Social sciences	16,154	16,083	15,969	16,582	16,566	16,298	16,903	17,223
Agricultural economics	1,019	903	895	893	889	848	932	961
Anthropology (cultural/social)	727	746	764	823	855	855	877	840
Economics (except agricultural)	6,053	5,995	5,810	5,966	6,034	6,089	6,145	6,383
Geography	652	661	654	643	602	602	666	688
History and philosophy of science	64	64	77	86	89	70	91	81
Linguistics	878	919	844	868	814	771	807	846

TABLE 36. Full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	4,123	4,131	4,151	4,492	4,435	4,370	4,580	4,877
Sociology	1,200	1,134	1,139	1,117	1,081	1,073	1,045	1,038
Sociology/anthropology	64	75	83	84	71	42	44	32
Social sciences, nec	1,374	1,455	1,552	1,610	1,696	1,578	1,716	1,477
Engineering	50,985	48,073	45,607	47,484	50,979	51,467	53,706	56,292
Aerospace engineering	1,563	1,548	1,478	1,327	1,366	1,366	1,427	1,520
Agricultural engineering	449	412	463	505	516	516	597	601
Architecture ^a	na	na	na	na	na	838	981	1,116
Biomedical engineering	1,754	1,857	1,876	1,948	2,018	2,024	2,175	2,374
Chemical engineering	3,496	3,380	3,218	3,241	3,350	3,448	3,683	3,806
Civil engineering ^a	6,409	6,121	5,722	5,554	5,828	5,161	5,531	5,960
Electrical engineering	19,328	17,940	17,059	18,683	20,513	20,628	20,726	20,920
Engineering science	878	893	786	795	691	689	702	736
Industrial engineering	4,373	4,029	3,564	3,625	4,379	4,540	5,072	5,111
Mechanical engineering	7,536	6,908	6,466	6,640	6,759	6,756	7,196	8,147
Metallurgical/materials engineering	2,426	2,363	2,441	2,390	2,410	2,378	2,509	2,706
Mining engineering	101	103	101	103	105	77	114	102
Nuclear engineering	340	339	325	300	254	247	250	266
Petroleum engineering	590	541	528	543	657	657	715	854
Engineering, nec	1,742	1,639	1,580	1,830	2,133	2,142	2,028	2,073
Health	6,180	6,153	6,445	6,867	6,671	6,426	6,832	6,928
Clinical medicine	2,273	2,177	2,141	2,345	2,515	2,188	2,326	2,376
Anesthesiology	13	8	7	11	2	2	2	2
Cardiology	15	16	17	16	8	8	12	8
Endocrinology	24	19	7	10	8	8	7	9
Gastroenterology	2	0	0	1	5	5	2	1
Hematology	7	1	1	2	2	2	4	4
Neurology ^a	486	520	559	597	634	314	278	249
Obstetrics/gynecology	5	4	6	3	15	15	8	8
Oncology/cancer research	33	45	76	71	58	51	47	45
Ophthalmology	18	23	13	16	13	6	0	0
Otorhinolaryngology	0	0	0	1	0	0	0	0
Pediatrics	41	42	56	45	39	39	35	33
Preventive medicine/community health	1,353	1,247	1,138	1,317	1,505	1,559	1,645	1,755
Psychiatry	9	13	14	9	8	8	10	8
Pulmonary disease	5	0	6	1	1	1	2	1
Radiology	62	57	46	58	38	38	68	92
Surgery	4	7	2	2	2	2	1	1
Clinical medicine, nec	196	175	193	185	177	130	205	160
Other health	3,907	3,976	4,304	4,522	4,156	4,238	4,506	4,552
Dental sciences	284	286	242	255	294	339	307	408
Nursing	462	413	404	469	348	348	400	361
Pharmaceutical sciences	1,431	1,474	1,596	1,650	1,501	1,521	1,675	1,816

TABLE 36. Full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	402	372	405	436	467	456	430	410
Veterinary sciences	349	341	381	405	387	482	503	523
Other health, nec	979	1,090	1,276	1,307	1,159	1,092	1,191	1,034

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 37. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	397,420	402,573	406,620	419,015	430,860	437,365	449,613	456,115
U.S. citizens and permanent residents	265,067	273,236	279,275	287,684	294,556	299,716	304,912	307,192
American Indian/Alaska Native	1,548	1,560	1,600	1,778	1,834	1,874	2,140	2,028
Asian/Pacific Islander	24,491	24,441	24,570	25,241	26,180	26,391	25,525	26,388
Black, non-Hispanic	17,678	18,500	18,740	19,936	19,625	20,078	21,903	22,362
Hispanic	17,299	18,009	18,707	19,441	19,991	20,264	20,310	21,195
White, non-Hispanic	186,056	190,541	192,546	197,195	200,044	203,760	206,023	206,533
Other or unknown	17,995	20,185	23,112	24,093	26,882	27,349	29,011	28,686
Temporary visa holders	132,353	129,337	127,345	131,331	136,304	137,649	144,701	148,923
Science and engineering	339,028	340,529	341,742	349,802	362,976	371,542	383,560	398,498
U.S. citizens and permanent residents	212,855	217,345	220,842	225,338	233,343	240,319	245,691	256,503
American Indian/Alaska Native	1,235	1,252	1,293	1,443	1,445	1,492	1,733	1,716
Asian/Pacific Islander	20,222	19,789	19,686	19,999	21,253	21,664	21,147	22,479
Black, non-Hispanic	13,522	14,022	14,186	14,858	15,003	15,528	16,839	17,779
Hispanic	13,674	14,231	14,916	15,381	15,994	16,378	16,622	17,755
White, non-Hispanic	149,129	151,506	152,110	153,827	157,463	162,261	165,333	172,067
Other or unknown	15,073	16,545	18,651	19,830	22,185	22,996	24,017	24,707
Temporary visa holders	126,173	123,184	120,900	124,464	129,633	131,223	137,869	141,995
Science	248,812	253,574	257,283	261,984	269,821	277,229	285,305	293,561
U.S. citizens and permanent residents	173,624	178,463	181,990	185,004	191,167	197,473	201,142	207,858
American Indian/Alaska Native	1,070	1,097	1,134	1,257	1,267	1,310	1,520	1,507
Asian/Pacific Islander	14,081	14,269	14,316	14,590	15,429	15,779	15,226	16,240
Black, non-Hispanic	11,687	12,062	12,217	12,718	12,834	13,308	14,556	15,407
Hispanic	11,384	11,825	12,512	12,855	13,352	13,705	13,930	14,653
White, non-Hispanic	123,261	125,402	126,329	127,836	130,378	134,711	136,236	140,148
Other or unknown	12,141	13,808	15,482	15,748	17,907	18,660	19,674	19,903
Temporary visa holders	75,188	75,111	75,293	76,980	78,654	79,756	84,163	85,703
Agricultural sciences	10,003	10,040	9,710	9,478	9,634	9,822	10,132	10,823
U.S. citizens and permanent residents	7,653	7,613	7,304	7,097	7,188	7,230	7,413	8,032
American Indian/Alaska Native	54	59	50	59	60	61	82	84
Asian/Pacific Islander	259	253	220	229	244	236	248	283
Black, non-Hispanic	346	298	310	307	283	285	311	274
Hispanic	368	408	374	397	426	443	435	535
White, non-Hispanic	6,307	6,261	5,995	5,717	5,726	5,775	5,798	6,282
Other or unknown	319	334	355	388	449	430	539	574
Temporary visa holders	2,350	2,427	2,406	2,381	2,446	2,592	2,719	2,791
Biological sciences	54,350	55,848	57,697	58,918	60,093	60,428	60,662	61,466
U.S. citizens and permanent residents	40,561	41,202	42,385	43,257	44,525	45,085	44,606	45,548
American Indian/Alaska Native	192	204	223	266	248	250	271	275
Asian/Pacific Islander	4,468	4,537	4,609	4,849	5,086	5,167	4,824	5,181
Black, non-Hispanic	2,097	2,241	2,318	2,418	2,486	2,509	2,645	2,831
Hispanic	2,334	2,485	2,617	2,725	2,879	2,890	2,921	3,116
White, non-Hispanic	29,022	29,270	29,917	30,331	30,750	30,900	30,493	30,541
Other or unknown	2,448	2,465	2,701	2,668	3,076	3,369	3,452	3,604
Temporary visa holders	13,789	14,646	15,312	15,661	15,568	15,343	16,056	15,918
Communication ^a	ne	ne	ne	ne	ne	4,528	5,224	6,091
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	3,549	4,058	4,757
American Indian/Alaska Native	ne	ne	ne	ne	ne	21	31	35
Asian/Pacific Islander	ne	ne	ne	ne	ne	152	196	232
Black, non-Hispanic	ne	ne	ne	ne	ne	279	335	366
Hispanic	ne	ne	ne	ne	ne	196	253	264
White, non-Hispanic	ne	ne	ne	ne	ne	2,608	2,909	3,390
Other or unknown	ne	ne	ne	ne	ne	293	334	470
Temporary visa holders	ne	ne	ne	ne	ne	979	1,166	1,334

TABLE 37. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Computer sciences	30,708	29,162	28,317	28,760	30,511	30,082	31,338	32,198
U.S. citizens and permanent residents	12,744	12,719	12,226	11,959	12,037	11,814	11,684	12,113
American Indian/Alaska Native	51	49	41	48	43	41	65	61
Asian/Pacific Islander	2,466	2,182	1,972	1,828	1,752	1,713	1,640	1,842
Black, non-Hispanic	800	788	764	738	825	813	803	914
Hispanic	465	508	494	529	483	480	498	580
White, non-Hispanic	7,757	7,962	7,725	7,390	7,064	6,926	7,051	7,291
Other or unknown	1,205	1,230	1,230	1,426	1,870	1,841	1,627	1,425
Temporary visa holders	17,964	16,443	16,091	16,801	18,474	18,268	19,654	20,085
Earth, atmospheric, and ocean sciences	11,497	11,685	11,370	11,431	11,376	10,892	11,171	11,589
U.S. citizens and permanent residents	8,976	9,122	8,871	8,924	8,926	8,547	8,668	9,060
American Indian/Alaska Native	50	51	47	52	61	53	59	61
Asian/Pacific Islander	286	348	312	311	334	312	307	327
Black, non-Hispanic	195	194	170	186	196	191	207	223
Hispanic	394	418	409	425	416	395	418	473
White, non-Hispanic	7,518	7,582	7,400	7,356	7,312	7,026	6,989	7,243
Other or unknown	533	529	533	594	607	570	688	733
Temporary visa holders	2,521	2,563	2,499	2,507	2,450	2,345	2,503	2,529
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	1,594	1,936	2,168
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	1,396	1,659	1,891
American Indian/Alaska Native	ne	ne	ne	ne	ne	14	13	11
Asian/Pacific Islander	ne	ne	ne	ne	ne	61	83	82
Black, non-Hispanic	ne	ne	ne	ne	ne	142	155	229
Hispanic	ne	ne	ne	ne	ne	50	66	83
White, non-Hispanic	ne	ne	ne	ne	ne	1,046	1,198	1,377
Other or unknown	ne	ne	ne	ne	ne	83	144	109
Temporary visa holders	ne	ne	ne	ne	ne	198	277	277
Mathematical sciences	14,627	14,916	15,261	15,571	15,966	15,668	16,241	16,885
U.S. citizens and permanent residents	7,923	8,225	8,534	8,749	9,063	8,943	8,942	9,283
American Indian/Alaska Native	16	19	25	40	31	29	37	32
Asian/Pacific Islander	807	849	871	887	880	854	849	922
Black, non-Hispanic	382	392	414	420	423	422	402	433
Hispanic	364	365	380	419	459	455	429	484
White, non-Hispanic	5,788	6,016	6,155	6,259	6,423	6,352	6,465	6,636
Other or unknown	566	584	689	724	847	831	760	776
Temporary visa holders	6,704	6,691	6,727	6,822	6,903	6,725	7,299	7,602
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,398	3,110	3,957
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	1,830	2,344	3,087
American Indian/Alaska Native	ne	ne	ne	ne	ne	23	34	33
Asian/Pacific Islander	ne	ne	ne	ne	ne	118	136	181
Black, non-Hispanic	ne	ne	ne	ne	ne	131	169	233
Hispanic	ne	ne	ne	ne	ne	110	167	190
White, non-Hispanic	ne	ne	ne	ne	ne	1,159	1,472	1,904
Other or unknown	ne	ne	ne	ne	ne	289	366	546
Temporary visa holders	ne	ne	ne	ne	ne	568	766	870
Neuroscience ^a	na	na	na	na	na	1,530	1,909	2,261
U.S. citizens and permanent residents	na	na	na	na	na	1,203	1,544	1,864
American Indian/Alaska Native	na	na	na	na	na	7	11	12
Asian/Pacific Islander	na	na	na	na	na	136	174	209
Black, non-Hispanic	na	na	na	na	na	55	60	81
Hispanic	na	na	na	na	na	75	96	116
White, non-Hispanic	na	na	na	na	na	865	1,091	1,284
Other or unknown	na	na	na	na	na	65	112	162
Temporary visa holders	na	na	na	na	na	327	365	397

TABLE 37. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Physical sciences	30,441	31,675	32,400	32,841	33,091	32,857	33,254	34,181
U.S. citizens and permanent residents	17,193	18,078	18,595	18,979	19,460	19,288	19,360	19,996
American Indian/Alaska Native	70	68	70	102	91	89	89	96
Asian/Pacific Islander	1,293	1,366	1,350	1,437	1,612	1,599	1,484	1,557
Black, non-Hispanic	736	802	784	785	772	770	786	800
Hispanic	923	1,026	1,055	1,032	1,061	1,057	1,047	1,105
White, non-Hispanic	13,154	13,725	14,200	14,245	14,544	14,404	14,439	14,904
Other or unknown	1,017	1,091	1,136	1,378	1,380	1,369	1,515	1,534
Temporary visa holders	13,248	13,597	13,805	13,862	13,631	13,569	13,894	14,185
Psychology	35,774	37,872	38,919	38,994	41,166	40,678	42,103	40,373
U.S. citizens and permanent residents	33,316	35,211	36,435	36,630	38,550	38,134	39,542	37,881
American Indian/Alaska Native	241	248	240	243	246	246	280	256
Asian/Pacific Islander	1,681	1,753	1,784	1,899	2,113	2,089	2,111	1,996
Black, non-Hispanic	2,571	2,761	2,856	2,986	2,910	2,877	3,423	3,453
Hispanic	3,271	3,353	3,494	3,527	3,670	3,652	3,807	3,451
White, non-Hispanic	23,355	23,707	23,909	24,420	25,701	25,396	25,579	24,906
Other or unknown	2,197	3,389	4,152	3,555	3,910	3,874	4,342	3,819
Temporary visa holders	2,458	2,661	2,484	2,364	2,616	2,544	2,561	2,492
Social sciences	61,412	62,376	63,609	65,991	67,984	66,752	68,225	71,569
U.S. citizens and permanent residents	45,258	46,293	47,640	49,409	51,418	50,454	51,322	54,346
American Indian/Alaska Native	396	399	438	447	487	476	548	551
Asian/Pacific Islander	2,821	2,981	3,198	3,150	3,408	3,342	3,174	3,428
Black, non-Hispanic	4,560	4,586	4,601	4,878	4,939	4,834	5,260	5,570
Hispanic	3,265	3,262	3,689	3,801	3,958	3,902	3,793	4,256
White, non-Hispanic	30,360	30,879	31,028	32,118	32,858	32,254	32,752	34,390
Other or unknown	3,856	4,186	4,686	5,015	5,768	5,646	5,795	6,151
Temporary visa holders	16,154	16,083	15,969	16,582	16,566	16,298	16,903	17,223
Engineering	90,216	86,955	84,459	87,818	93,155	94,313	98,255	104,937
U.S. citizens and permanent residents	39,231	38,882	38,852	40,334	42,176	42,846	44,549	48,645
American Indian/Alaska Native	165	155	159	186	178	182	213	209
Asian/Pacific Islander	6,141	5,520	5,370	5,409	5,824	5,885	5,921	6,239
Black, non-Hispanic	1,835	1,960	1,969	2,140	2,169	2,220	2,283	2,372
Hispanic	2,290	2,406	2,404	2,526	2,642	2,673	2,692	3,102
White, non-Hispanic	25,868	26,104	25,781	25,991	27,085	27,550	29,097	31,919
Other or unknown	2,932	2,737	3,169	4,082	4,278	4,336	4,343	4,804
Temporary visa holders	50,985	48,073	45,607	47,484	50,979	51,467	53,706	56,292
Aerospace engineering	3,243	3,243	3,241	3,374	3,482	3,482	3,691	3,974
U.S. citizens and permanent residents	1,680	1,695	1,763	2,047	2,116	2,116	2,264	2,454
American Indian/Alaska Native	12	9	8	9	9	9	16	11
Asian/Pacific Islander	141	150	173	204	216	216	236	248
Black, non-Hispanic	43	42	47	49	57	57	83	70
Hispanic	72	75	80	86	95	95	101	119
White, non-Hispanic	1,283	1,300	1,313	1,322	1,486	1,486	1,560	1,697
Other or unknown	129	119	142	377	253	253	268	309
Temporary visa holders	1,563	1,548	1,478	1,327	1,366	1,366	1,427	1,520
Agricultural engineering	900	842	855	893	917	917	1,022	1,084
U.S. citizens and permanent residents	451	430	392	388	401	401	425	483
American Indian/Alaska Native	1	0	1	3	1	1	0	0
Asian/Pacific Islander	31	39	33	30	24	24	22	19
Black, non-Hispanic	24	22	19	20	18	18	17	28
Hispanic	11	6	11	13	9	9	17	22
White, non-Hispanic	363	354	311	307	322	322	351	386
Other or unknown	21	9	17	15	27	27	18	28
Temporary visa holders	449	412	463	505	516	516	597	601

TABLE 37. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Architecture ^a	na	na	na	na	na	4,097	5,211	6,112
U.S. citizens and permanent residents	na	na	na	na	na	3,259	4,230	4,996
American Indian/Alaska Native	na	na	na	na	na	15	32	32
Asian/Pacific Islander	na	na	na	na	na	214	273	296
Black, non-Hispanic	na	na	na	na	na	172	217	230
Hispanic	na	na	na	na	na	184	332	404
White, non-Hispanic	na	na	na	na	na	2,382	3,008	3,546
Other or unknown	na	na	na	na	na	292	368	488
Temporary visa holders	na	na	na	na	na	838	981	1,116
Biomedical engineering	4,717	5,047	5,254	5,666	5,898	5,921	6,262	6,859
U.S. citizens and permanent residents	2,963	3,190	3,378	3,718	3,880	3,897	4,087	4,485
American Indian/Alaska Native	7	14	12	17	18	18	19	17
Asian/Pacific Islander	552	659	679	764	835	836	826	970
Black, non-Hispanic	135	166	169	184	178	178	182	202
Hispanic	128	151	151	199	219	219	183	244
White, non-Hispanic	1,902	1,999	2,099	2,270	2,249	2,265	2,504	2,700
Other or unknown	239	201	268	284	381	381	373	352
Temporary visa holders	1,754	1,857	1,876	1,948	2,018	2,024	2,175	2,374
Chemical engineering	6,414	6,379	6,139	6,218	6,275	6,459	6,762	7,110
U.S. citizens and permanent residents	2,918	2,999	2,921	2,977	2,925	3,011	3,079	3,304
American Indian/Alaska Native	18	25	23	16	13	13	13	13
Asian/Pacific Islander	406	348	375	407	379	389	401	442
Black, non-Hispanic	133	137	116	120	119	124	119	128
Hispanic	205	208	204	223	207	207	191	189
White, non-Hispanic	2,040	2,158	2,056	2,064	2,051	2,122	2,170	2,315
Other or unknown	116	123	147	147	156	156	185	217
Temporary visa holders	3,496	3,380	3,218	3,241	3,350	3,448	3,683	3,806
Civil engineering ^a	13,710	13,588	13,196	13,074	14,691	11,336	11,909	13,503
U.S. citizens and permanent residents	7,301	7,467	7,474	7,520	8,863	6,175	6,378	7,543
American Indian/Alaska Native	36	33	32	43	52	40	32	34
Asian/Pacific Islander	656	640	617	580	705	534	555	708
Black, non-Hispanic	251	262	273	308	409	286	266	313
Hispanic	561	562	590	618	668	515	456	561
White, non-Hispanic	5,359	5,524	5,441	5,337	6,275	4,288	4,524	5,083
Other or unknown	438	446	521	634	754	512	545	844
Temporary visa holders	6,409	6,121	5,722	5,554	5,828	5,161	5,531	5,960
Electrical engineering	28,929	26,732	25,849	27,379	28,934	29,076	29,212	29,282
U.S. citizens and permanent residents	9,601	8,792	8,790	8,696	8,421	8,448	8,486	8,362
American Indian/Alaska Native	31	27	26	28	29	30	33	33
Asian/Pacific Islander	2,546	2,003	1,983	1,831	1,663	1,665	1,691	1,670
Black, non-Hispanic	438	477	462	497	467	470	468	481
Hispanic	555	560	578	539	522	522	507	530
White, non-Hispanic	5,169	5,050	4,967	4,785	4,777	4,798	4,674	4,737
Other or unknown	862	675	774	1,016	963	963	1,113	911
Temporary visa holders	19,328	17,940	17,059	18,683	20,513	20,628	20,726	20,920
Engineering science	1,770	1,741	1,613	1,656	1,454	1,432	1,486	1,490
U.S. citizens and permanent residents	892	848	827	861	763	743	784	754
American Indian/Alaska Native	8	9	9	7	6	5	4	4
Asian/Pacific Islander	127	124	119	124	130	119	112	95
Black, non-Hispanic	32	26	22	34	23	23	24	24
Hispanic	42	31	29	30	23	22	33	38
White, non-Hispanic	651	616	594	600	524	522	532	502
Other or unknown	32	42	54	66	57	52	79	91
Temporary visa holders	878	893	786	795	691	689	702	736

TABLE 37. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Industrial engineering	7,098	6,591	6,113	6,421	7,036	7,422	8,216	8,362
U.S. citizens and permanent residents	2,725	2,562	2,549	2,796	2,657	2,882	3,144	3,251
American Indian/Alaska Native	14	10	15	22	8	10	12	16
Asian/Pacific Islander	345	303	287	334	357	407	364	350
Black, non-Hispanic	258	253	255	276	270	271	348	322
Hispanic	190	233	210	211	199	209	221	248
White, non-Hispanic	1,616	1,515	1,500	1,511	1,400	1,487	1,779	1,836
Other or unknown	302	248	282	442	423	498	420	479
Temporary visa holders	4,373	4,029	3,564	3,625	4,379	4,540	5,072	5,111
Mechanical engineering	13,356	12,718	12,178	12,666	13,170	13,160	13,763	15,609
U.S. citizens and permanent residents	5,820	5,810	5,712	6,026	6,411	6,404	6,567	7,462
American Indian/Alaska Native	22	18	20	23	25	25	24	28
Asian/Pacific Islander	620	583	557	579	857	858	813	788
Black, non-Hispanic	247	243	282	283	261	260	250	272
Hispanic	315	347	331	371	417	417	402	447
White, non-Hispanic	4,237	4,242	4,117	4,332	4,352	4,345	4,518	5,286
Other or unknown	379	377	405	438	499	499	560	641
Temporary visa holders	7,536	6,908	6,466	6,640	6,759	6,756	7,196	8,147
Metallurgical/materials engineering	4,386	4,359	4,507	4,627	4,667	4,613	4,811	5,181
U.S. citizens and permanent residents	1,960	1,996	2,066	2,237	2,257	2,235	2,302	2,475
American Indian/Alaska Native	6	3	4	6	8	8	12	9
Asian/Pacific Islander	264	285	274	290	291	288	305	310
Black, non-Hispanic	93	78	80	114	114	110	98	85
Hispanic	82	75	81	83	95	96	94	126
White, non-Hispanic	1,441	1,466	1,534	1,592	1,583	1,558	1,635	1,780
Other or unknown	74	89	93	152	166	175	158	165
Temporary visa holders	2,426	2,363	2,441	2,390	2,410	2,378	2,509	2,706
Mining engineering	219	238	212	181	209	142	207	212
U.S. citizens and permanent residents	118	135	111	78	104	65	93	110
American Indian/Alaska Native	2	1	0	1	0	0	2	1
Asian/Pacific Islander	5	6	3	0	6	5	7	8
Black, non-Hispanic	1	4	3	2	5	0	3	7
Hispanic	2	5	6	3	5	3	7	9
White, non-Hispanic	98	112	82	64	83	53	72	82
Other or unknown	10	7	17	8	5	4	2	3
Temporary visa holders	101	103	101	103	105	77	114	102
Nuclear engineering	752	809	840	910	960	951	941	968
U.S. citizens and permanent residents	412	470	515	610	706	704	691	702
American Indian/Alaska Native	0	2	3	2	2	2	3	3
Asian/Pacific Islander	22	33	37	31	42	42	46	46
Black, non-Hispanic	9	15	17	15	15	15	19	16
Hispanic	22	21	26	36	35	35	36	32
White, non-Hispanic	341	375	407	478	516	514	536	541
Other or unknown	18	24	25	48	96	96	51	64
Temporary visa holders	340	339	325	300	254	247	250	266
Petroleum engineering	684	660	631	647	792	792	828	993
U.S. citizens and permanent residents	94	119	103	104	135	135	113	139
American Indian/Alaska Native	0	0	0	0	0	0	0	0
Asian/Pacific Islander	10	19	10	10	11	11	8	14
Black, non-Hispanic	6	14	19	14	29	29	19	12
Hispanic	11	12	11	10	10	10	6	9
White, non-Hispanic	60	66	59	57	72	72	72	100
Other or unknown	7	8	4	13	13	13	8	4
Temporary visa holders	590	541	528	543	657	657	715	854

TABLE 37. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Engineering, nec	4,038	4,008	3,831	4,106	4,670	4,513	3,934	4,198
U.S. citizens and permanent residents	2,296	2,369	2,251	2,276	2,537	2,371	1,906	2,125
American Indian/Alaska Native	8	4	6	9	7	6	11	8
Asian/Pacific Islander	416	328	223	225	308	277	262	275
Black, non-Hispanic	165	221	205	224	204	207	170	182
Hispanic	94	120	96	104	138	130	106	124
White, non-Hispanic	1,308	1,327	1,301	1,272	1,395	1,336	1,162	1,328
Other or unknown	305	369	420	442	485	415	195	208
Temporary visa holders	1,742	1,639	1,580	1,830	2,133	2,142	2,028	2,073
Health ^a	58,392	62,044	64,878	69,213	67,884	65,823	66,053	57,617
U.S. citizens and permanent residents	52,212	55,891	58,433	62,346	61,213	59,397	59,221	50,689
American Indian/Alaska Native	313	308	307	335	389	382	407	312
Asian/Pacific Islander	4,269	4,652	4,884	5,242	4,927	4,727	4,378	3,909
Black, non-Hispanic	4,156	4,478	4,554	5,078	4,622	4,550	5,064	4,583
Hispanic	3,625	3,778	3,791	4,060	3,997	3,886	3,688	3,440
White, non-Hispanic	36,927	39,035	40,436	43,368	42,581	41,499	40,690	34,466
Other or unknown	2,922	3,640	4,461	4,263	4,697	4,353	4,994	3,979
Temporary visa holders	6,180	6,153	6,445	6,867	6,671	6,426	6,832	6,928

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All sources	397,420	402,573	406,620	419,015	430,860	437,365	449,613	456,115
Federal	81,761	83,816	83,723	83,962	81,542	81,859	78,464	81,565
DOD	9,204	9,007	8,993	8,867	8,874	8,885	8,219	8,683
DOE	4,024	4,135	4,392	4,480	4,281	4,284	4,341	4,608
HHS	29,231	30,900	30,780	31,249	30,049	30,101	28,499	28,706
NIH	24,309	26,689	26,868	27,587	26,982	27,015	26,003	26,506
Other HHS	4,922	4,211	3,912	3,662	3,067	3,086	2,496	2,200
NASA	3,230	2,916	2,691	2,364	2,314	2,317	2,344	2,426
NSF	19,308	19,975	20,387	20,339	19,747	19,792	19,882	21,682
USDA	3,468	3,563	3,351	3,000	2,796	2,810	2,770	2,706
Other	13,296	13,320	13,129	13,663	13,481	13,670	12,409	12,754
Institutional	151,713	154,514	156,332	160,405	167,836	171,128	179,439	177,680
Other nonfederal	29,216	27,165	27,162	28,042	27,189	27,349	26,052	26,914
Domestic	26,118	24,325	24,548	25,384	24,262	24,410	22,238	22,910
Foreign	3,098	2,840	2,614	2,658	2,927	2,939	3,814	4,004
Self-support	134,730	137,078	139,403	146,606	154,293	157,029	165,658	169,956
Science and engineering	339,028	340,529	341,742	349,802	362,976	371,542	383,560	398,498
Federal	72,328	74,168	74,536	74,327	72,651	73,802	71,527	75,757
DOD	8,908	8,678	8,645	8,502	8,534	8,556	7,903	8,445
DOE	4,011	4,119	4,376	4,453	4,245	4,250	4,317	4,594
HHS	22,242	23,722	23,951	24,381	23,670	24,510	24,004	24,733
NIH	20,441	22,383	22,801	23,330	22,649	23,472	22,884	23,570
Other HHS	1,801	1,339	1,150	1,051	1,021	1,038	1,120	1,163
NASA	3,217	2,891	2,671	2,350	2,306	2,310	2,336	2,423
NSF	19,160	19,806	20,179	20,056	19,525	19,594	19,676	21,513
USDA	3,390	3,479	3,264	2,902	2,721	2,721	2,702	2,625
Other	11,400	11,473	11,450	11,683	11,650	11,861	10,589	11,424
Institutional	139,533	141,274	142,288	145,596	151,403	155,283	164,272	164,136
Other nonfederal	26,465	24,529	24,419	24,858	24,248	24,508	23,707	24,412
Domestic	23,697	21,944	22,009	22,386	21,572	21,815	20,155	20,700
Foreign	2,768	2,585	2,410	2,472	2,676	2,693	3,552	3,712
Self-support	100,702	100,558	100,499	105,021	114,674	117,949	124,054	134,193
Science	248,812	253,574	257,283	261,984	269,821	277,229	285,305	293,561
Federal	50,855	52,885	53,304	53,029	51,710	52,693	50,788	52,890
DOD	3,426	3,364	3,307	3,160	3,254	3,233	3,131	3,222
DOE	2,292	2,358	2,456	2,510	2,486	2,484	2,480	2,529
HHS	20,286	21,588	21,697	21,900	21,050	21,883	21,220	21,781
NIH	18,796	20,476	20,733	20,984	20,185	21,001	20,234	20,806
Other HHS	1,490	1,112	964	916	865	882	986	975
NASA	1,575	1,463	1,395	1,301	1,306	1,302	1,311	1,300
NSF	12,434	13,018	13,317	13,132	12,884	12,856	12,832	13,876
USDA	2,971	3,071	2,931	2,570	2,417	2,421	2,403	2,342
Other	7,871	8,023	8,201	8,456	8,313	8,514	7,411	7,840
Institutional	108,310	110,279	112,564	114,849	118,896	122,469	129,064	128,924
Other nonfederal	15,320	14,689	14,624	15,099	14,827	14,986	14,152	14,292
Domestic	13,477	13,001	13,086	13,475	13,205	13,367	12,071	12,073
Foreign	1,843	1,688	1,538	1,624	1,622	1,619	2,081	2,219
Self-support	74,327	75,721	76,791	79,007	84,388	87,081	91,301	97,455
Agricultural sciences	10,003	10,040	9,710	9,478	9,634	9,822	10,132	10,823
Federal	2,505	2,516	2,343	2,282	2,245	2,298	2,026	2,179
DOD	33	24	24	25	58	57	26	23
DOE	58	49	53	42	53	53	38	58
HHS	89	90	84	78	74	74	68	70
NIH	60	67	74	67	52	52	61	53
Other HHS	29	23	10	11	22	22	7	17
NASA	90	52	49	42	41	47	39	41
NSF	211	202	211	216	257	258	225	266

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
USDA	1,333	1,369	1,278	1,169	1,031	1,083	1,066	1,110
Other	691	730	644	710	731	726	564	611
Institutional	3,949	4,050	3,987	4,079	4,275	4,435	4,829	4,684
Other nonfederal	1,584	1,592	1,460	1,297	1,238	1,289	1,310	1,358
Domestic	1,413	1,463	1,355	1,218	1,179	1,225	1,178	1,272
Foreign	171	129	105	79	59	64	132	86
Self-support	1,965	1,882	1,920	1,820	1,876	1,800	1,967	2,602
Biological sciences	54,350	55,848	57,697	58,918	60,093	60,428	60,662	61,466
Federal	20,178	21,736	22,131	22,204	21,065	21,015	20,024	20,572
DOD	363	442	360	370	387	383	417	422
DOE	193	224	253	214	178	177	176	201
HHS	14,886	16,142	16,223	16,626	15,754	15,763	15,129	15,533
NIH	14,161	15,627	15,704	16,117	15,340	15,359	14,671	15,138
Other HHS	725	515	519	509	414	404	458	395
NASA	98	107	94	81	65	67	51	55
NSF	2,137	2,266	2,322	2,228	2,138	2,139	2,153	2,306
USDA	1,034	1,078	1,078	907	905	845	797	771
Other	1,467	1,477	1,801	1,778	1,638	1,641	1,301	1,284
Institutional	22,369	22,398	23,476	23,846	25,230	25,123	25,858	25,511
Other nonfederal	3,990	3,796	3,956	4,229	4,119	4,091	3,913	3,896
Domestic	3,702	3,552	3,698	3,940	3,849	3,825	3,535	3,433
Foreign	288	244	258	289	270	266	378	463
Self-support	7,813	7,918	8,134	8,639	9,679	10,199	10,867	11,487
Communication ^a	ne	ne	ne	ne	ne	4,528	5,224	6,091
Federal	ne	ne	ne	ne	ne	124	105	136
DOD	ne	ne	ne	ne	ne	8	8	19
DOE	ne	ne	ne	ne	ne	0	2	1
HHS	ne	ne	ne	ne	ne	23	28	28
NIH	ne	ne	ne	ne	ne	19	24	21
Other HHS	ne	ne	ne	ne	ne	4	4	7
NASA	ne	ne	ne	ne	ne	0	0	0
NSF	ne	ne	ne	ne	ne	14	21	40
USDA	ne	ne	ne	ne	ne	7	7	5
Other	ne	ne	ne	ne	ne	72	39	43
Institutional	ne	ne	ne	ne	ne	2,433	2,919	3,090
Other nonfederal	ne	ne	ne	ne	ne	213	310	319
Domestic	ne	ne	ne	ne	ne	186	296	301
Foreign	ne	ne	ne	ne	ne	27	14	18
Self-support	ne	ne	ne	ne	ne	1,758	1,890	2,546
Computer sciences	30,708	29,162	28,317	28,760	30,511	30,082	31,338	32,198
Federal	5,325	5,133	5,367	5,025	5,157	5,082	4,957	5,254
DOD	1,379	1,184	1,405	1,197	1,247	1,224	1,201	1,216
DOE	159	155	156	164	176	178	141	143
HHS	303	295	327	311	359	358	368	341
NIH	231	262	289	268	331	329	324	307
Other HHS	72	33	38	43	28	29	44	34
NASA	226	141	95	86	102	102	86	76
NSF	2,717	2,748	2,819	2,714	2,751	2,700	2,639	2,883
USDA	39	37	21	33	28	29	10	12
Other	502	573	544	520	494	491	512	583
Institutional	9,257	9,022	9,028	9,032	9,187	9,091	9,986	10,025
Other nonfederal	1,948	1,733	1,680	1,651	1,510	1,375	1,297	1,439
Domestic	1,758	1,547	1,480	1,442	1,310	1,196	1,078	1,176
Foreign	190	186	200	209	200	179	219	263
Self-support	14,178	13,274	12,242	13,052	14,657	14,534	15,098	15,480
Earth, atmospheric, and ocean sciences	11,497	11,685	11,370	11,431	11,376	10,892	11,171	11,589
Federal	3,306	3,343	3,309	3,316	3,306	3,185	3,112	3,102

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
DOD	254	128	154	132	116	111	114	100
DOE	155	171	166	117	148	145	148	145
HHS	68	42	34	64	26	26	30	36
NIH	52	25	22	55	25	25	22	24
Other HHS	16	17	12	9	1	1	8	12
NASA	420	456	458	417	429	417	433	444
NSF	1,376	1,513	1,505	1,544	1,505	1,453	1,451	1,465
USDA	85	93	73	71	79	67	72	50
Other	948	940	919	971	1,003	966	864	862
Institutional	5,083	5,221	5,026	4,934	4,987	4,774	5,051	5,179
Other nonfederal	882	912	955	1,062	930	871	921	928
Domestic	766	840	859	983	833	781	778	777
Foreign	116	72	96	79	97	90	143	151
Self-support	2,226	2,209	2,080	2,119	2,153	2,062	2,087	2,380
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	1,594	1,936	2,168
Federal	ne	ne	ne	ne	ne	95	103	120
DOD	ne	ne	ne	ne	ne	3	6	7
DOE	ne	ne	ne	ne	ne	0	0	0
HHS	ne	ne	ne	ne	ne	47	38	49
NIH	ne	ne	ne	ne	ne	31	28	40
Other HHS	ne	ne	ne	ne	ne	16	10	9
NASA	ne	ne	ne	ne	ne	0	0	0
NSF	ne	ne	ne	ne	ne	9	9	13
USDA	ne	ne	ne	ne	ne	4	24	11
Other	ne	ne	ne	ne	ne	32	26	40
Institutional	ne	ne	ne	ne	ne	761	997	993
Other nonfederal	ne	ne	ne	ne	ne	78	105	108
Domestic	ne	ne	ne	ne	ne	78	100	103
Foreign	ne	ne	ne	ne	ne	0	5	5
Self-support	ne	ne	ne	ne	ne	660	731	947
Mathematical sciences	14,627	14,916	15,261	15,571	15,966	15,668	16,241	16,885
Federal	1,680	1,720	1,756	1,760	1,714	1,677	1,638	1,895
DOD	232	165	187	175	178	167	169	148
DOE	53	64	69	64	54	53	49	51
HHS	154	174	165	178	189	192	171	205
NIH	119	154	155	152	159	163	155	183
Other HHS	35	20	10	26	30	29	16	22
NASA	23	24	24	18	16	12	13	21
NSF	975	1,031	1,028	1,011	994	970	980	1,143
USDA	9	33	35	19	19	19	15	16
Other	234	229	248	295	264	264	241	311
Institutional	9,650	9,976	10,155	10,163	10,337	10,271	10,859	10,732
Other nonfederal	520	377	431	461	516	504	425	480
Domestic	425	298	348	391	461	456	328	354
Foreign	95	79	83	70	55	48	97	126
Self-support	2,777	2,843	2,919	3,187	3,399	3,216	3,319	3,778
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,398	3,110	3,957
Federal	ne	ne	ne	ne	ne	374	366	386
DOD	ne	ne	ne	ne	ne	24	23	22
DOE	ne	ne	ne	ne	ne	5	8	6
HHS	ne	ne	ne	ne	ne	56	55	75
NIH	ne	ne	ne	ne	ne	49	52	71
Other HHS	ne	ne	ne	ne	ne	7	3	4
NASA	ne	ne	ne	ne	ne	5	4	3
NSF	ne	ne	ne	ne	ne	134	113	134
USDA	ne	ne	ne	ne	ne	13	7	15
Other	ne	ne	ne	ne	ne	137	156	131

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Institutional	ne	ne	ne	ne	ne	903	1,397	1,647
Other nonfederal	ne	ne	ne	ne	ne	87	122	150
Domestic	ne	ne	ne	ne	ne	78	92	109
Foreign	ne	ne	ne	ne	ne	9	30	41
Self-support	ne	ne	ne	ne	ne	1,034	1,225	1,774
Neuroscience ^a	na	na	na	na	na	1,530	1,909	2,261
Federal	na	na	na	na	na	844	1,046	1,200
DOD	na	na	na	na	na	9	10	33
DOE	na	na	na	na	na	0	1	1
HHS	na	na	na	na	na	785	957	1,072
NIH	na	na	na	na	na	780	948	1,046
Other HHS	na	na	na	na	na	5	9	26
NASA	na	na	na	na	na	0	1	0
NSF	na	na	na	na	na	22	53	75
USDA	na	na	na	na	na	0	0	1
Other	na	na	na	na	na	28	24	18
Institutional	na	na	na	na	na	529	656	838
Other nonfederal	na	na	na	na	na	88	111	139
Domestic	na	na	na	na	na	82	102	127
Foreign	na	na	na	na	na	6	9	12
Self-support	na	na	na	na	na	69	96	84
Physical sciences	30,441	31,675	32,400	32,841	33,091	32,857	33,254	34,181
Federal	10,615	11,186	11,217	11,246	11,271	11,195	10,706	11,103
DOD	885	1,146	892	906	1,005	999	868	907
DOE	1,607	1,613	1,695	1,835	1,797	1,793	1,868	1,896
HHS	2,446	2,531	2,622	2,530	2,566	2,537	2,400	2,377
NIH	2,179	2,356	2,480	2,408	2,409	2,380	2,259	2,223
Other HHS	267	175	142	122	157	157	141	154
NASA	574	560	580	573	586	585	607	573
NSF	3,868	4,095	4,168	4,106	3,920	3,891	3,973	4,192
USDA	66	45	40	25	34	33	67	35
Other	1,169	1,196	1,220	1,271	1,363	1,357	923	1,123
Institutional	16,119	16,743	17,174	17,477	17,543	17,475	18,415	18,449
Other nonfederal	2,084	2,097	2,161	2,195	2,204	2,190	1,991	2,045
Domestic	1,957	1,997	2,068	2,084	2,015	2,001	1,756	1,783
Foreign	127	100	93	111	189	189	235	262
Self-support	1,623	1,649	1,848	1,923	2,073	1,997	2,142	2,584
Psychology	35,774	37,872	38,919	38,994	41,166	40,678	42,103	40,373
Federal	3,568	3,621	3,685	3,559	3,542	3,438	3,385	3,443
DOD	150	140	150	152	136	121	126	138
DOE	10	27	30	32	30	30	7	0
HHS	1,866	1,875	1,847	1,737	1,694	1,645	1,595	1,588
NIH	1,621	1,668	1,705	1,600	1,549	1,505	1,391	1,382
Other HHS	245	207	142	137	145	140	204	206
NASA	27	32	12	13	2	3	6	6
NSF	330	369	394	417	421	382	362	411
USDA	17	20	15	11	6	6	3	6
Other	1,168	1,158	1,237	1,197	1,253	1,251	1,286	1,294
Institutional	13,295	13,677	13,837	14,167	15,182	15,009	14,788	14,298
Other nonfederal	1,314	1,399	1,420	1,562	1,574	1,512	1,232	1,214
Domestic	1,231	1,353	1,390	1,510	1,515	1,459	1,124	1,115
Foreign	83	46	30	52	59	53	108	99
Self-support	17,597	19,175	19,977	19,706	20,868	20,719	22,698	21,418
Social sciences	61,412	62,376	63,609	65,991	67,984	66,752	68,225	71,569
Federal	3,678	3,630	3,496	3,637	3,410	3,366	3,320	3,500
DOD	130	135	135	203	127	127	163	187
DOE	57	55	34	42	50	50	42	27

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007 old ^a	2007 new ^a	2008	2009
HHS	474	439	395	376	388	377	381	407
NIH	373	317	304	317	320	309	299	318
Other HHS	101	122	91	59	68	68	82	89
NASA	117	91	83	71	65	64	71	81
NSF	820	794	870	896	898	884	853	948
USDA	388	396	391	335	315	315	335	310
Other	1,692	1,720	1,588	1,714	1,567	1,549	1,475	1,540
Institutional	28,588	29,192	29,881	31,151	32,155	31,665	33,309	33,478
Other nonfederal	2,998	2,783	2,561	2,642	2,736	2,688	2,415	2,216
Domestic	2,225	1,951	1,888	1,907	2,043	2,000	1,704	1,523
Foreign	773	832	673	735	693	688	711	693
Self-support	26,148	26,771	27,671	28,561	29,683	29,033	29,181	32,375
Engineering	90,216	86,955	84,459	87,818	93,155	94,313	98,255	104,937
Federal	21,473	21,283	21,232	21,298	20,941	21,109	20,739	22,867
DOD	5,482	5,314	5,338	5,342	5,280	5,323	4,772	5,223
DOE	1,719	1,761	1,920	1,943	1,759	1,766	1,837	2,065
HHS	1,956	2,134	2,254	2,481	2,620	2,627	2,784	2,952
NIH	1,645	1,907	2,068	2,346	2,464	2,471	2,650	2,764
Other HHS	311	227	186	135	156	156	134	188
NASA	1,642	1,428	1,276	1,049	1,000	1,008	1,025	1,123
NSF	6,726	6,788	6,862	6,924	6,641	6,738	6,844	7,637
USDA	419	408	333	332	304	300	299	283
Other	3,529	3,450	3,249	3,227	3,337	3,347	3,178	3,584
Institutional	31,223	30,995	29,724	30,747	32,507	32,814	35,208	35,212
Other nonfederal	11,145	9,840	9,795	9,759	9,421	9,522	9,555	10,120
Domestic	10,220	8,943	8,923	8,911	8,367	8,448	8,084	8,627
Foreign	925	897	872	848	1,054	1,074	1,471	1,493
Self-support	26,375	24,837	23,708	26,014	30,286	30,868	32,753	36,738
Aerospace engineering	3,243	3,243	3,241	3,374	3,482	3,482	3,691	3,974
Federal	1,197	1,215	1,216	1,157	1,135	1,135	1,236	1,346
DOD	471	537	557	540	482	482	509	588
DOE	44	50	42	42	47	47	47	43
HHS	10	12	16	17	19	19	12	13
NIH	8	10	15	15	15	15	11	13
Other HHS	2	2	1	2	4	4	1	0
NASA	462	423	382	318	336	336	382	434
NSF	122	117	136	139	131	131	140	143
USDA	1	0	1	1	0	0	0	0
Other	87	76	82	100	120	120	146	125
Institutional	1,056	920	972	977	1,065	1,065	1,233	1,169
Other nonfederal	296	364	281	395	479	479	265	334
Domestic	253	298	244	347	382	382	190	253
Foreign	43	66	37	48	97	97	75	81
Self-support	694	744	772	845	803	803	957	1,125
Agricultural engineering	900	842	855	893	917	917	1,022	1,084
Federal	277	239	253	268	245	245	279	298
DOD	13	9	13	15	8	8	17	33
DOE	8	0	6	9	10	10	12	26
HHS	12	14	10	7	8	8	10	12
NIH	9	3	7	4	8	8	9	9
Other HHS	3	11	3	3	0	0	1	3
NASA	15	14	7	16	9	9	4	5
NSF	20	25	25	21	30	30	33	39
USDA	160	136	121	149	113	113	119	116
Other	49	41	71	51	67	67	84	67
Institutional	369	357	377	400	451	451	492	466
Other nonfederal	117	135	126	106	126	126	129	148

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Domestic	99	122	113	97	112	112	96	129
Foreign	18	13	13	9	14	14	33	19
Self-support	137	111	99	119	95	95	122	172
Architecture ^a	na	na	na	na	na	4,097	5,211	6,112
Federal	na	na	na	na	na	38	41	104
DOD	na	na	na	na	na	9	5	4
DOE	na	na	na	na	na	2	5	4
HHS	na	na	na	na	na	0	3	3
NIH	na	na	na	na	na	0	2	2
Other HHS	na	na	na	na	na	0	1	1
NASA	na	na	na	na	na	0	0	0
NSF	na	na	na	na	na	6	7	12
USDA	na	na	na	na	na	1	3	1
Other	na	na	na	na	na	20	18	80
Institutional	na	na	na	na	na	1,545	1,955	1,957
Other nonfederal	na	na	na	na	na	173	163	301
Domestic	na	na	na	na	na	150	134	265
Foreign	na	na	na	na	na	23	29	36
Self-support	na	na	na	na	na	2,341	3,052	3,750
Biomedical engineering	4,717	5,047	5,254	5,666	5,898	5,921	6,262	6,859
Federal	1,439	1,527	1,639	1,807	2,089	2,100	2,230	2,449
DOD	71	88	87	99	93	93	122	157
DOE	13	9	18	25	26	26	42	50
HHS	896	1,002	1,137	1,245	1,412	1,423	1,542	1,618
NIH	861	991	1,122	1,234	1,389	1,400	1,500	1,589
Other HHS	35	11	15	11	23	23	42	29
NASA	37	42	32	10	15	15	14	16
NSF	232	248	252	280	306	306	352	417
USDA	1	6	5	5	6	6	5	6
Other	189	132	108	143	231	231	153	185
Institutional	1,331	1,550	1,661	1,840	1,936	1,948	2,177	2,277
Other nonfederal	847	729	679	637	530	530	633	688
Domestic	825	690	648	622	512	512	572	620
Foreign	22	39	31	15	18	18	61	68
Self-support	1,100	1,241	1,275	1,382	1,343	1,343	1,222	1,445
Chemical engineering	6,414	6,379	6,139	6,218	6,275	6,459	6,762	7,110
Federal	2,055	2,146	2,097	2,105	1,985	2,039	2,044	2,121
DOD	265	218	204	179	164	173	162	187
DOE	327	352	365	371	352	353	374	373
HHS	245	298	274	328	282	294	302	304
NIH	210	262	236	298	248	260	267	263
Other HHS	35	36	38	30	34	34	35	41
NASA	103	95	90	67	52	52	30	31
NSF	841	873	851	816	814	848	860	913
USDA	35	46	46	61	62	62	60	54
Other	239	264	267	283	259	257	256	259
Institutional	2,540	2,479	2,343	2,341	2,502	2,587	2,775	2,933
Other nonfederal	995	957	920	995	972	1,023	1,009	1,039
Domestic	932	902	870	933	813	861	863	886
Foreign	63	55	50	62	159	162	146	153
Self-support	824	797	779	777	816	810	934	1,017
Civil engineering ^a	13,710	13,588	13,196	13,074	14,691	11,336	11,909	13,503
Federal	2,185	2,155	2,000	1,871	1,892	1,873	1,730	1,984
DOD	148	169	180	143	205	200	189	193
DOE	94	90	92	64	73	71	73	108
HHS	61	59	60	56	48	48	40	54
NIH	45	33	32	30	39	39	34	35

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Other HHS	16	26	28	26	9	9	6	19
NASA	87	59	68	57	59	65	75	98
NSF	704	702	652	659	656	652	546	637
USDA	69	73	64	40	52	47	45	44
Other	1,022	1,003	884	852	799	790	762	850
Institutional	5,553	5,703	5,341	5,385	6,030	4,729	5,283	5,530
Other nonfederal	1,483	1,240	1,169	1,174	1,145	1,003	1,013	1,025
Domestic	1,378	1,108	1,055	1,080	1,024	897	838	863
Foreign	105	132	114	94	121	106	175	162
Self-support	4,489	4,490	4,686	4,644	5,624	3,731	3,883	4,964
Electrical engineering	28,929	26,732	25,849	27,379	28,934	29,076	29,212	29,282
Federal	6,198	6,000	6,036	5,985	5,817	5,874	5,905	6,259
DOD	2,233	1,969	1,946	1,937	1,908	1,925	1,975	2,046
DOE	189	211	236	245	214	213	186	226
HHS	356	351	360	421	402	402	418	429
NIH	246	291	314	394	378	379	394	397
Other HHS	110	60	46	27	24	23	24	32
NASA	373	335	244	217	215	215	209	204
NSF	2,256	2,363	2,501	2,488	2,351	2,393	2,492	2,714
USDA	57	54	23	21	22	20	14	11
Other	734	717	726	656	705	706	611	629
Institutional	8,933	8,564	8,334	8,622	8,983	9,002	9,014	8,705
Other nonfederal	3,310	2,794	3,058	2,646	2,558	2,590	2,512	2,496
Domestic	3,080	2,630	2,793	2,446	2,383	2,411	2,238	2,231
Foreign	230	164	265	200	175	179	274	265
Self-support	10,488	9,374	8,421	10,126	11,576	11,610	11,781	11,822
Engineering science	1,770	1,741	1,613	1,656	1,454	1,432	1,486	1,490
Federal	618	556	593	581	434	425	455	473
DOD	265	166	164	126	96	96	95	95
DOE	62	65	78	100	77	77	84	109
HHS	32	42	55	58	48	48	51	33
NIH	24	37	46	56	44	44	51	30
Other HHS	8	5	9	2	4	4	0	3
NASA	29	22	20	24	13	13	16	20
NSF	165	207	234	230	166	156	168	179
USDA	13	14	1	1	3	3	5	2
Other	52	40	41	42	31	32	36	35
Institutional	685	776	654	630	625	607	563	571
Other nonfederal	160	176	177	175	103	104	109	125
Domestic	138	157	159	158	95	96	85	105
Foreign	22	19	18	17	8	8	24	20
Self-support	307	233	189	270	292	296	359	321
Industrial engineering	7,098	6,591	6,113	6,421	7,036	7,422	8,216	8,362
Federal	989	968	950	896	771	822	876	1,000
DOD	251	303	342	321	251	270	251	327
DOE	58	45	46	46	32	34	73	55
HHS	73	66	68	65	81	81	78	103
NIH	36	43	56	54	53	52	68	80
Other HHS	37	23	12	11	28	29	10	23
NASA	58	43	52	21	23	28	25	30
NSF	387	334	291	281	249	275	289	310
USDA	11	12	9	9	8	8	7	11
Other	151	165	142	153	127	126	153	164
Institutional	2,364	2,341	2,147	2,324	2,268	2,318	2,610	2,411
Other nonfederal	695	600	574	550	513	579	675	649
Domestic	617	520	514	473	409	436	562	519
Foreign	78	80	60	77	104	143	113	130

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Self-support	3,050	2,682	2,442	2,651	3,484	3,703	4,055	4,302
Mechanical engineering	13,356	12,718	12,178	12,666	13,170	13,160	13,763	15,609
Federal	3,417	3,162	3,097	3,240	3,191	3,187	3,171	3,629
DOD	876	730	703	781	853	851	852	967
DOE	351	360	342	393	332	332	371	386
HHS	166	180	186	187	190	190	193	221
NIH	135	154	159	171	168	168	183	199
Other HHS	31	26	27	16	22	22	10	22
NASA	350	282	258	217	190	190	193	213
NSF	1,104	1,040	1,055	1,096	1,082	1,080	1,071	1,258
USDA	20	22	19	11	17	17	15	16
Other	550	548	534	555	527	527	476	568
Institutional	5,055	4,991	4,671	4,893	5,040	5,044	5,271	5,620
Other nonfederal	1,740	1,490	1,399	1,529	1,480	1,468	1,487	1,715
Domestic	1,610	1,338	1,268	1,370	1,323	1,312	1,205	1,437
Foreign	130	152	131	159	157	156	282	278
Self-support	3,144	3,075	3,011	3,004	3,459	3,461	3,834	4,645
Metallurgical/materials engineering	4,386	4,359	4,507	4,627	4,667	4,613	4,811	5,181
Federal	1,670	1,590	1,587	1,628	1,601	1,618	1,690	2,020
DOD	474	376	364	369	401	404	388	398
DOE	263	270	319	318	254	261	287	346
HHS	38	50	36	58	64	58	75	85
NIH	29	43	31	57	62	56	75	82
Other HHS	9	7	5	1	2	2	0	3
NASA	62	52	58	52	30	30	33	32
NSF	650	657	639	661	606	615	645	768
USDA	3	4	7	6	5	5	11	16
Other	180	181	164	164	241	245	251	375
Institutional	1,384	1,518	1,612	1,589	1,682	1,628	1,701	1,646
Other nonfederal	820	730	775	815	794	769	761	622
Domestic	740	657	705	755	709	686	633	497
Foreign	80	73	70	60	85	83	128	125
Self-support	512	521	533	595	590	598	659	893
Mining engineering	219	238	212	181	209	142	207	212
Federal	64	50	40	29	37	26	24	33
DOD	2	0	1	1	3	0	0	2
DOE	26	18	17	14	10	10	12	6
HHS	15	13	1	1	5	7	4	14
NIH	0	1	0	1	3	5	3	10
Other HHS	15	12	1	0	2	2	1	4
NASA	0	0	2	0	0	0	0	0
NSF	7	7	4	2	5	0	2	4
USDA	0	2	1	1	0	0	0	0
Other	14	10	14	10	14	9	6	7
Institutional	89	112	110	90	91	75	75	62
Other nonfederal	17	19	15	12	24	21	68	72
Domestic	16	17	13	11	24	21	68	72
Foreign	1	2	2	1	0	0	0	0
Self-support	49	57	47	50	57	20	40	45
Nuclear engineering	752	809	840	910	960	951	941	968
Federal	339	336	368	338	328	326	335	403
DOD	43	48	48	48	35	35	46	60
DOE	192	197	231	208	212	212	182	208
HHS	5	12	12	8	11	9	9	10
NIH	1	6	12	8	10	8	9	10
Other HHS	4	6	0	0	1	1	0	0
NASA	15	13	10	9	16	16	7	10

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
NSF	9	7	10	5	19	19	17	18
USDA	1	0	0	0	0	0	0	0
Other	74	59	57	60	35	35	74	97
Institutional	186	272	234	337	376	370	345	268
Other nonfederal	102	102	112	102	113	113	127	164
Domestic	89	99	100	89	101	101	100	153
Foreign	13	3	12	13	12	12	27	11
Self-support	125	99	126	133	143	142	134	133
Petroleum engineering	684	660	631	647	792	792	828	993
Federal	65	58	97	64	100	100	28	38
DOD	0	2	0	1	0	0	0	0
DOE	53	47	86	51	73	73	15	29
HHS	1	1	0	0	1	1	0	0
NIH	0	0	0	0	0	0	0	0
Other HHS	1	1	0	0	1	1	0	0
NASA	0	0	2	0	7	7	0	0
NSF	2	3	4	5	9	9	3	2
USDA	1	1	3	1	0	0	1	1
Other	8	4	2	6	10	10	9	6
Institutional	265	302	180	208	252	252	264	316
Other nonfederal	176	144	224	248	275	275	349	423
Domestic	94	80	185	192	215	215	282	320
Foreign	82	64	39	56	60	60	67	103
Self-support	178	156	130	127	165	165	187	216
Engineering, nec	4,038	4,008	3,831	4,106	4,670	4,513	3,934	4,198
Federal	960	1,281	1,259	1,329	1,316	1,301	695	710
DOD	370	699	729	782	781	777	161	166
DOE	39	47	42	57	47	45	74	96
HHS	46	34	39	30	49	39	47	53
NIH	41	33	38	24	47	37	44	45
Other HHS	5	1	1	6	2	2	3	8
NASA	51	48	51	41	35	32	37	30
NSF	227	205	208	241	217	218	219	223
USDA	47	38	33	26	16	18	14	5
Other	180	210	157	152	171	172	143	137
Institutional	1,413	1,110	1,088	1,111	1,206	1,193	1,450	1,281
Other nonfederal	387	360	286	375	309	269	255	319
Domestic	349	325	256	338	265	256	218	277
Foreign	38	35	30	37	44	13	37	42
Self-support	1,278	1,257	1,198	1,291	1,839	1,750	1,534	1,888
Health ^a	58,392	62,044	64,878	69,213	67,884	65,823	66,053	57,617
Federal	9,433	9,648	9,187	9,635	8,891	8,057	6,937	5,808
DOD	296	329	348	365	340	329	316	238
DOE	13	16	16	27	36	34	24	14
HHS	6,989	7,178	6,829	6,868	6,379	5,591	4,495	3,973
NIH	3,868	4,306	4,067	4,257	4,333	3,543	3,119	2,936
Other HHS	3,121	2,872	2,762	2,611	2,046	2,048	1,376	1,037
NASA	13	25	20	14	8	7	8	3
NSF	148	169	208	283	222	198	206	169
USDA	78	84	87	98	75	89	68	81
Other	1,896	1,847	1,679	1,980	1,831	1,809	1,820	1,330
Institutional	12,180	13,240	14,044	14,809	16,433	15,845	15,167	13,544
Other nonfederal	2,751	2,636	2,743	3,184	2,941	2,841	2,345	2,502

TABLE 38. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Domestic	2,421	2,381	2,539	2,998	2,690	2,595	2,083	2,210
Foreign	330	255	204	186	251	246	262	292
Self-support	34,028	36,520	38,904	41,585	39,619	39,080	41,604	35,763

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; nec = not elsewhere classified; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 39. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	397,420	402,573	406,620	419,015	430,860	437,365	449,613	456,115
Fellowships	34,460	35,034	36,414	36,689	38,340	38,631	38,599	38,931
Research assistantships	114,256	114,768	114,304	114,774	115,192	116,043	118,349	121,443
Teaching assistantships	73,105	73,009	74,238	75,911	77,817	79,948	83,135	81,828
Traineeships	15,126	14,903	14,570	14,571	13,437	13,497	13,317	12,830
Other types of support	160,473	164,859	167,094	177,070	186,074	189,246	196,213	201,083
Self-support	134,730	137,078	139,403	146,606	154,293	157,029	165,658	169,956
Other	25,743	27,781	27,691	30,464	31,781	32,217	30,555	31,127
Science and engineering	339,028	340,529	341,742	349,802	362,976	371,542	383,560	398,498
Fellowships	31,780	32,184	33,557	33,659	34,855	35,587	35,827	36,272
Research assistantships	107,294	107,489	106,739	107,211	107,610	109,000	111,574	114,681
Teaching assistantships	69,476	69,165	70,230	71,562	73,113	75,510	79,025	78,285
Traineeships	10,169	9,892	9,946	9,801	9,395	9,707	9,997	9,989
Other types of support	120,309	121,799	121,270	127,569	138,003	141,738	147,137	159,271
Self-support	100,702	100,558	100,499	105,021	114,674	117,949	124,054	134,193
Other	19,607	21,241	20,771	22,548	23,329	23,789	23,083	25,078
Science	248,812	253,574	257,283	261,984	269,821	277,229	285,305	293,561
Fellowships	24,514	24,989	26,298	26,441	26,981	27,663	27,824	28,108
Research assistantships	69,965	71,664	71,999	72,019	72,506	73,554	74,263	74,749
Teaching assistantships	56,945	56,994	58,320	59,384	60,575	62,851	65,603	65,208
Traineeships	9,113	8,936	8,916	8,798	8,474	8,786	9,106	9,100
Other types of support	88,275	90,991	91,750	95,342	101,285	104,375	108,509	116,396
Self-support	74,327	75,721	76,791	79,007	84,388	87,081	91,301	97,455
Other	13,948	15,270	14,959	16,335	16,897	17,294	17,208	18,941
Agricultural sciences	10,003	10,040	9,710	9,478	9,634	9,822	10,132	10,823
Fellowships	568	599	656	555	654	679	692	721
Research assistantships	5,823	5,870	5,534	5,367	5,434	5,627	5,618	5,543
Teaching assistantships	1,169	1,216	1,187	1,191	1,199	1,224	1,340	1,406
Traineeships	52	74	20	50	40	40	27	31
Other types of support	2,391	2,281	2,313	2,315	2,307	2,252	2,455	3,122
Self-support	1,965	1,882	1,920	1,820	1,876	1,800	1,967	2,602
Other	426	399	393	495	431	452	488	520
Biological sciences	54,350	55,848	57,697	58,918	60,093	60,428	60,662	61,466
Fellowships	6,477	6,629	7,148	6,816	6,667	6,700	6,769	6,518
Research assistantships	22,706	23,918	24,602	25,002	24,962	24,728	24,137	23,985
Teaching assistantships	9,145	8,847	9,129	9,474	9,801	9,811	9,645	9,685
Traineeships	5,649	5,624	5,710	5,511	5,595	5,629	5,903	5,896
Other types of support	10,373	10,830	11,108	12,115	13,068	13,560	14,208	15,382
Self-support	7,813	7,918	8,134	8,639	9,679	10,199	10,867	11,487
Other	2,560	2,912	2,974	3,476	3,389	3,361	3,341	3,895
Communication ^a	ne	ne	ne	ne	ne	4,528	5,224	6,091
Fellowships	ne	ne	ne	ne	ne	173	223	293
Research assistantships	ne	ne	ne	ne	ne	573	652	634
Teaching assistantships	ne	ne	ne	ne	ne	1,762	2,117	2,190
Traineeships	ne	ne	ne	ne	ne	28	17	26
Other types of support	ne	ne	ne	ne	ne	1,992	2,215	2,948
Self-support	ne	ne	ne	ne	ne	1,758	1,890	2,546
Other	ne	ne	ne	ne	ne	234	325	402
Computer sciences	30,708	29,162	28,317	28,760	30,511	30,082	31,338	32,198
Fellowships	1,387	1,411	1,465	1,490	1,483	1,467	1,673	1,887
Research assistantships	7,500	7,197	7,186	7,252	7,276	7,038	7,345	7,556
Teaching assistantships	5,029	4,819	4,742	4,558	4,636	4,598	4,867	4,735
Traineeships	332	288	231	186	175	175	169	174
Other types of support	16,460	15,447	14,693	15,274	16,941	16,804	17,284	17,846
Self-support	14,178	13,274	12,242	13,052	14,657	14,534	15,098	15,480

TABLE 39. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Other	2,282	2,173	2,451	2,222	2,284	2,270	2,186	2,366
Earth, atmospheric, and ocean sciences	11,497	11,685	11,370	11,431	11,376	10,892	11,171	11,589
Fellowships	1,175	1,227	1,356	1,308	1,280	1,191	1,277	1,259
Research assistantships	4,597	4,829	4,740	4,729	4,699	4,475	4,553	4,679
Teaching assistantships	2,810	2,691	2,664	2,770	2,718	2,655	2,788	2,735
Traineeships	115	123	111	106	70	74	79	68
Other types of support	2,800	2,815	2,499	2,518	2,609	2,497	2,474	2,848
Self-support	2,226	2,209	2,080	2,119	2,153	2,062	2,087	2,380
Other	574	606	419	399	456	435	387	468
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	1,594	1,936	2,168
Fellowships	ne	ne	ne	ne	ne	90	120	136
Research assistantships	ne	ne	ne	ne	ne	338	412	471
Teaching assistantships	ne	ne	ne	ne	ne	441	523	472
Traineeships	ne	ne	ne	ne	ne	9	0	1
Other types of support	ne	ne	ne	ne	ne	716	881	1,088
Self-support	ne	ne	ne	ne	ne	660	731	947
Other	ne	ne	ne	ne	ne	56	150	141
Mathematical sciences	14,627	14,916	15,261	15,571	15,966	15,668	16,241	16,885
Fellowships	1,382	1,345	1,428	1,535	1,553	1,544	1,576	1,711
Research assistantships	1,810	1,923	1,892	1,807	1,871	1,814	1,875	1,967
Teaching assistantships	7,923	8,031	8,220	8,216	8,411	8,363	8,735	8,651
Traineeships	123	108	95	101	128	131	156	139
Other types of support	3,389	3,509	3,626	3,912	4,003	3,816	3,899	4,417
Self-support	2,777	2,843	2,919	3,187	3,399	3,216	3,319	3,778
Other	612	666	707	725	604	600	580	639
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,398	3,110	3,957
Fellowships	ne	ne	ne	ne	ne	262	531	626
Research assistantships	ne	ne	ne	ne	ne	528	550	640
Teaching assistantships	ne	ne	ne	ne	ne	296	412	495
Traineeships	ne	ne	ne	ne	ne	39	46	45
Other types of support	ne	ne	ne	ne	ne	1,273	1,571	2,151
Self-support	ne	ne	ne	ne	ne	1,034	1,225	1,774
Other	ne	ne	ne	ne	ne	239	346	377
Neuroscience ^a	na	na	na	na	na	1,530	1,909	2,261
Fellowships	na	na	na	na	na	372	381	462
Research assistantships	na	na	na	na	na	634	833	955
Teaching assistantships	na	na	na	na	na	199	177	198
Traineeships	na	na	na	na	na	211	349	426
Other types of support	na	na	na	na	na	114	169	220
Self-support	na	na	na	na	na	69	96	84
Other	na	na	na	na	na	45	73	136
Physical sciences	30,441	31,675	32,400	32,841	33,091	32,857	33,254	34,181
Fellowships	2,514	2,731	2,790	3,114	3,147	3,134	2,872	2,896
Research assistantships	13,527	13,702	14,013	13,904	13,891	13,771	14,051	14,456
Teaching assistantships	11,818	12,253	12,593	12,580	12,644	12,622	13,081	12,928
Traineeships	364	366	422	437	425	423	391	432
Other types of support	2,218	2,623	2,582	2,806	2,984	2,907	2,859	3,469
Self-support	1,623	1,649	1,848	1,923	2,073	1,997	2,142	2,584
Other	595	974	734	883	911	910	717	885
Psychology	35,774	37,872	38,919	38,994	41,166	40,678	42,103	40,373
Fellowships	2,299	2,396	2,511	2,611	2,483	2,428	2,153	2,044
Research assistantships	5,584	6,031	5,838	5,760	6,076	5,914	6,100	5,701
Teaching assistantships	6,081	5,934	6,219	6,552	6,599	6,494	6,660	6,649
Traineeships	1,184	900	1,080	1,066	995	986	966	1,072
Other types of support	20,626	22,611	23,271	23,005	25,013	24,856	26,224	24,907

TABLE 39. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Self-support	17,597	19,175	19,977	19,706	20,868	20,719	22,698	21,418
Other	3,029	3,436	3,294	3,299	4,145	4,137	3,526	3,489
Social sciences	61,412	62,376	63,609	65,991	67,984	66,752	68,225	71,569
Fellowships	8,712	8,651	8,944	9,012	9,714	9,623	9,557	9,555
Research assistantships	8,418	8,194	8,194	8,198	8,297	8,114	8,137	8,162
Teaching assistantships	12,970	13,203	13,566	14,043	14,567	14,386	15,258	15,064
Traineeships	1,294	1,453	1,247	1,341	1,046	1,041	1,003	790
Other types of support	30,018	30,875	31,658	33,397	34,360	33,588	34,270	37,998
Self-support	26,148	26,771	27,671	28,561	29,683	29,033	29,181	32,375
Other	3,870	4,104	3,987	4,836	4,677	4,555	5,089	5,623
Engineering	90,216	86,955	84,459	87,818	93,155	94,313	98,255	104,937
Fellowships	7,266	7,195	7,259	7,218	7,874	7,924	8,003	8,164
Research assistantships	37,329	35,825	34,740	35,192	35,104	35,446	37,311	39,932
Teaching assistantships	12,531	12,171	11,910	12,178	12,538	12,659	13,422	13,077
Traineeships	1,056	956	1,030	1,003	921	921	891	889
Other types of support	32,034	30,808	29,520	32,227	36,718	37,363	38,628	42,875
Self-support	26,375	24,837	23,708	26,014	30,286	30,868	32,753	36,738
Other	5,659	5,971	5,812	6,213	6,432	6,495	5,875	6,137
Aerospace engineering	3,243	3,243	3,241	3,374	3,482	3,482	3,691	3,974
Fellowships	274	282	260	302	386	386	334	319
Research assistantships	1,564	1,454	1,369	1,390	1,486	1,486	1,566	1,708
Teaching assistantships	411	377	460	480	519	519	532	503
Traineeships	36	40	35	40	33	33	34	36
Other types of support	958	1,090	1,117	1,162	1,058	1,058	1,225	1,408
Self-support	694	744	772	845	803	803	957	1,125
Other	264	346	345	317	255	255	268	283
Agricultural engineering	900	842	855	893	917	917	1,022	1,084
Fellowships	79	64	59	34	40	40	62	73
Research assistantships	564	558	578	604	628	628	751	751
Teaching assistantships	83	64	69	68	61	61	50	32
Traineeships	11	11	2	11	36	36	0	2
Other types of support	163	145	147	176	152	152	159	226
Self-support	137	111	99	119	95	95	122	172
Other	26	34	48	57	57	57	37	54
Architecture ^a	na	na	na	na	na	4,097	5,211	6,112
Fellowships	na	na	na	na	na	335	395	387
Research assistantships	na	na	na	na	na	330	306	330
Teaching assistantships	na	na	na	na	na	723	900	848
Traineeships	na	na	na	na	na	10	1	4
Other types of support	na	na	na	na	na	2,699	3,609	4,543
Self-support	na	na	na	na	na	2,341	3,052	3,750
Other	na	na	na	na	na	358	557	793
Biomedical engineering	4,717	5,047	5,254	5,666	5,898	5,921	6,262	6,859
Fellowships	793	838	778	812	815	819	938	1,014
Research assistantships	2,008	2,047	2,231	2,437	2,549	2,560	2,970	3,260
Teaching assistantships	412	458	458	480	518	518	535	532
Traineeships	297	304	336	360	361	361	347	382
Other types of support	1,207	1,400	1,451	1,577	1,655	1,663	1,472	1,671
Self-support	1,100	1,241	1,275	1,382	1,343	1,343	1,222	1,445
Other	107	159	176	195	312	320	250	226
Chemical engineering	6,414	6,379	6,139	6,218	6,275	6,459	6,762	7,110
Fellowships	837	692	658	683	772	814	873	834
Research assistantships	3,603	3,754	3,593	3,654	3,600	3,704	3,792	4,071
Teaching assistantships	851	789	757	746	766	811	840	849
Traineeships	73	102	123	114	72	69	78	90

TABLE 39. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Other types of support	1,050	1,042	1,008	1,021	1,065	1,061	1,179	1,266
Self-support	824	797	779	777	816	810	934	1,017
Other	226	245	229	244	249	251	245	249
Civil engineering ^a	13,710	13,588	13,196	13,074	14,691	11,336	11,909	13,503
Fellowships	1,115	1,093	1,103	1,041	1,235	931	940	952
Research assistantships	5,033	4,870	4,450	4,354	4,471	4,272	4,395	4,917
Teaching assistantships	2,011	2,096	1,993	2,141	2,296	1,617	1,840	1,791
Traineeships	196	152	160	148	158	148	175	103
Other types of support	5,355	5,377	5,490	5,390	6,531	4,368	4,559	5,740
Self-support	4,489	4,490	4,686	4,644	5,624	3,731	3,883	4,964
Other	866	887	804	746	907	637	676	776
Electrical engineering	28,929	26,732	25,849	27,379	28,934	29,076	29,212	29,282
Fellowships	1,535	1,522	1,571	1,542	1,788	1,786	1,667	1,617
Research assistantships	10,814	10,168	10,196	9,874	9,650	9,737	10,116	10,513
Teaching assistantships	4,227	3,924	3,869	3,853	3,856	3,882	3,961	3,814
Traineeships	128	123	147	94	48	48	66	43
Other types of support	12,225	10,995	10,066	12,016	13,592	13,623	13,402	13,295
Self-support	10,488	9,374	8,421	10,126	11,576	11,610	11,781	11,822
Other	1,737	1,621	1,645	1,890	2,016	2,013	1,621	1,473
Engineering science	1,770	1,741	1,613	1,656	1,454	1,432	1,486	1,490
Fellowships	235	272	306	298	233	224	194	164
Research assistantships	768	864	811	752	572	559	623	724
Teaching assistantships	225	235	188	200	191	191	136	155
Traineeships	26	22	20	29	23	23	19	7
Other types of support	516	348	288	377	435	435	514	440
Self-support	307	233	189	270	292	296	359	321
Other	209	115	99	107	143	139	155	119
Industrial engineering	7,098	6,591	6,113	6,421	7,036	7,422	8,216	8,362
Fellowships	442	437	419	417	352	424	424	433
Research assistantships	1,843	1,691	1,505	1,586	1,548	1,640	1,917	1,771
Teaching assistantships	964	940	924	964	980	1,011	1,077	1,017
Traineeships	42	46	51	54	62	62	51	45
Other types of support	3,807	3,477	3,214	3,400	4,094	4,285	4,747	5,096
Self-support	3,050	2,682	2,442	2,651	3,484	3,703	4,055	4,302
Other	757	795	772	749	610	582	692	794
Mechanical engineering	13,356	12,718	12,178	12,666	13,170	13,160	13,763	15,609
Fellowships	991	917	927	986	1,088	1,086	1,178	1,319
Research assistantships	6,048	5,704	5,329	5,638	5,611	5,607	5,549	6,266
Teaching assistantships	2,310	2,203	2,185	2,245	2,338	2,339	2,410	2,464
Traineeships	117	102	109	95	62	54	67	132
Other types of support	3,890	3,792	3,628	3,702	4,071	4,074	4,559	5,428
Self-support	3,144	3,075	3,011	3,004	3,459	3,461	3,834	4,645
Other	746	717	617	698	612	613	725	783
Metallurgical/materials engineering	4,386	4,359	4,507	4,627	4,667	4,613	4,811	5,181
Fellowships	467	556	652	547	565	532	487	498
Research assistantships	2,853	2,729	2,767	2,849	2,822	2,837	2,996	3,119
Teaching assistantships	417	411	413	460	496	451	422	438
Traineeships	33	21	23	29	29	32	37	31
Other types of support	616	642	652	742	755	761	869	1,095
Self-support	512	521	533	595	590	598	659	893
Other	104	121	119	147	165	163	210	202
Mining engineering	219	238	212	181	209	142	207	212
Fellowships	29	23	13	7	16	16	7	8
Research assistantships	100	92	98	63	86	74	115	110
Teaching assistantships	23	27	22	31	28	22	36	33

TABLE 39. Full-time graduate students in science, engineering, and health fields in all institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Traineeships	0	1	0	0	0	0	0	0
Other types of support	67	95	79	80	79	30	49	61
Self-support	49	57	47	50	57	20	40	45
Other	18	38	32	30	22	10	9	16
Nuclear engineering	752	809	840	910	960	951	941	968
Fellowships	95	109	122	141	142	142	141	158
Research assistantships	449	456	447	470	480	472	476	499
Teaching assistantships	56	68	62	62	85	85	76	89
Traineeships	4	6	7	6	8	8	12	9
Other types of support	148	170	202	231	245	244	236	213
Self-support	125	99	126	133	143	142	134	133
Other	23	71	76	98	102	102	102	80
Petroleum engineering	684	660	631	647	792	792	828	993
Fellowships	70	88	81	60	55	55	27	55
Research assistantships	260	269	302	314	410	410	435	525
Teaching assistantships	49	71	64	85	82	82	126	120
Traineeships	5	3	3	3	5	5	0	0
Other types of support	300	229	181	185	240	240	240	293
Self-support	178	156	130	127	165	165	187	216
Other	122	73	51	58	75	75	53	77
Engineering, nec	4,038	4,008	3,831	4,106	4,670	4,513	3,934	4,198
Fellowships	304	302	310	348	387	334	336	333
Research assistantships	1,422	1,169	1,064	1,207	1,191	1,130	1,304	1,368
Teaching assistantships	492	508	446	363	322	347	481	392
Traineeships	88	23	14	20	24	32	4	5
Other types of support	1,732	2,006	1,997	2,168	2,746	2,670	1,809	2,100
Self-support	1,278	1,257	1,198	1,291	1,839	1,750	1,534	1,888
Other	454	749	799	877	907	920	275	212
Health ^a	58,392	62,044	64,878	69,213	67,884	65,823	66,053	57,617
Fellowships	2,680	2,850	2,857	3,030	3,485	3,044	2,772	2,659
Research assistantships	6,962	7,279	7,565	7,563	7,582	7,043	6,775	6,762
Teaching assistantships	3,629	3,844	4,008	4,349	4,704	4,438	4,110	3,543
Traineeships	4,957	5,011	4,624	4,770	4,042	3,790	3,320	2,841
Other types of support	40,164	43,060	45,824	49,501	48,071	47,508	49,076	41,812
Self-support	34,028	36,520	38,904	41,585	39,619	39,080	41,604	35,763
Other	6,136	6,540	6,920	7,916	8,452	8,428	7,472	6,049

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 54. Graduate students in science and engineering fields in doctorate-granting institutions, by enrollment status, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Enrollment status, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Full-time and part-time enrollment	430,065	432,748	436,320	445,037	457,931	469,517	482,711	497,223
U.S. citizens and permanent residents	288,123	294,384	301,565	308,425	316,140	326,029	331,190	342,119
American Indian/Alaska Native	1,626	1,583	1,683	1,843	1,889	1,973	2,277	2,285
Asian/Pacific Islander	26,226	25,941	26,162	26,567	27,735	28,280	27,634	29,235
Black, non-Hispanic	20,279	20,611	21,160	21,850	22,765	23,563	24,359	25,513
Hispanic	17,843	18,712	19,760	20,420	21,188	21,719	22,174	23,131
White, non-Hispanic	200,716	203,493	204,845	208,070	211,323	218,172	221,451	227,567
Other or unknown	21,433	24,044	27,955	29,675	31,240	32,322	33,295	34,388
Temporary visa holders	141,942	138,364	134,755	136,612	141,791	143,488	151,521	155,104
Full-time enrollment	320,469	322,655	323,371	331,382	342,430	350,133	362,344	376,569
U.S. citizens and permanent residents	197,640	202,854	205,484	210,783	217,999	224,239	229,834	239,731
American Indian/Alaska Native	1,127	1,131	1,153	1,308	1,311	1,352	1,573	1,601
Asian/Pacific Islander	18,100	18,195	18,131	18,734	19,878	20,261	19,624	21,052
Black, non-Hispanic	12,082	12,634	12,596	13,262	13,611	14,045	15,253	16,131
Hispanic	12,318	12,893	13,392	13,885	14,400	14,716	15,015	16,093
White, non-Hispanic	140,504	142,931	143,048	145,374	148,610	152,924	156,422	162,190
Other or unknown	13,509	15,070	17,164	18,220	20,189	20,941	21,947	22,664
Temporary visa holders	122,829	119,801	117,887	120,599	124,431	125,894	132,510	136,838
Part-time enrollment	109,596	110,093	112,949	113,655	115,501	119,384	120,367	120,654
U.S. citizens and permanent residents	90,483	91,530	96,081	97,642	98,141	101,790	101,356	102,388
American Indian/Alaska Native	499	452	530	535	578	621	704	684
Asian/Pacific Islander	8,126	7,746	8,031	7,833	7,857	8,019	8,010	8,183
Black, non-Hispanic	8,197	7,977	8,564	8,588	9,154	9,518	9,106	9,382
Hispanic	5,525	5,819	6,368	6,535	6,788	7,003	7,159	7,038
White, non-Hispanic	60,212	60,562	61,797	62,696	62,713	65,248	65,029	65,377
Other or unknown	7,924	8,974	10,791	11,455	11,051	11,381	11,348	11,724
Temporary visa holders	19,113	18,563	16,868	16,013	17,360	17,594	19,011	18,266

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 40. Full-time graduate students in science and engineering fields in all institutions, by primary mechanism and primary source of support: 2003–09

Primary mechanism and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All sources	339,028	340,529	341,742	349,802	362,976	371,542	383,560	398,498
Federal	72,328	74,168	74,536	74,327	72,651	73,802	71,527	75,757
DOD	8,908	8,678	8,645	8,502	8,534	8,556	7,903	8,445
DOE	4,011	4,119	4,376	4,453	4,245	4,250	4,317	4,594
HHS	22,242	23,722	23,951	24,381	23,670	24,510	24,004	24,733
NIH	20,441	22,383	22,801	23,330	22,649	23,472	22,884	23,570
Other HHS	1,801	1,339	1,150	1,051	1,021	1,038	1,120	1,163
NASA	3,217	2,891	2,671	2,350	2,306	2,310	2,336	2,423
NSF	19,160	19,806	20,179	20,056	19,525	19,594	19,676	21,513
USDA	3,390	3,479	3,264	2,902	2,721	2,721	2,702	2,625
Other	11,400	11,473	11,450	11,683	11,650	11,861	10,589	11,424
Institutional	139,533	141,274	142,288	145,596	151,403	155,283	164,272	164,136
Other nonfederal	26,465	24,529	24,419	24,858	24,248	24,508	23,707	24,412
Domestic	23,697	21,944	22,009	22,386	21,572	21,815	20,155	20,700
Foreign	2,768	2,585	2,410	2,472	2,676	2,693	3,552	3,712
Self-support	100,702	100,558	100,499	105,021	114,674	117,949	124,054	134,193
Fellowships	31,780	32,184	33,557	33,659	34,855	35,587	35,827	36,272
Federal	6,979	7,249	7,554	7,466	7,546	7,819	7,620	7,985
DOD	436	412	363	410	490	496	529	581
DOE	151	129	149	168	197	199	165	156
HHS	1,367	1,520	1,450	1,472	1,566	1,746	1,760	1,762
NIH	1,196	1,395	1,360	1,414	1,503	1,681	1,671	1,669
Other HHS	171	125	90	58	63	65	89	93
NASA	265	264	281	261	285	286	285	301
NSF	3,135	3,317	3,503	3,278	3,220	3,248	3,182	3,425
USDA	93	85	72	47	119	120	125	120
Other	1,532	1,522	1,736	1,830	1,669	1,724	1,574	1,640
Institutional	20,055	20,549	21,867	22,051	23,235	23,630	24,277	24,312
Other nonfederal	4,746	4,386	4,136	4,142	4,074	4,138	3,930	3,975
Domestic	3,714	3,440	3,148	3,068	3,011	3,063	2,752	2,640
Foreign	1,032	946	988	1,074	1,063	1,075	1,178	1,335
Self-support	na	na	na	na	na	na	na	na
Research assistantships	107,294	107,489	106,739	107,211	107,610	109,000	111,574	114,681
Federal	54,322	55,350	55,056	54,367	54,070	54,637	53,128	56,189
DOD	6,834	6,244	6,060	5,863	6,092	6,106	6,095	6,570
DOE	3,762	3,851	4,076	4,099	3,963	3,965	4,044	4,321
HHS	15,126	16,394	16,512	16,792	16,593	17,041	16,508	16,904
NIH	13,761	15,404	15,717	16,033	15,792	16,229	15,699	16,041
Other HHS	1,365	990	795	759	801	812	809	863
NASA	2,817	2,526	2,245	1,956	1,921	1,924	1,947	2,012
NSF	15,209	15,608	15,712	15,740	15,450	15,492	15,460	16,929
USDA	3,113	3,236	3,053	2,632	2,391	2,390	2,408	2,353
Other	7,461	7,491	7,398	7,285	7,660	7,719	6,666	7,100
Institutional	36,600	36,822	36,289	36,703	38,302	39,003	43,313	42,913
Other nonfederal	16,372	15,317	15,394	16,141	15,238	15,360	15,133	15,579
Domestic	15,732	14,721	14,837	15,590	14,391	14,511	13,719	14,307
Foreign	640	596	557	551	847	849	1,414	1,272
Self-support	na	na	na	na	na	na	na	na
Teaching assistantships	69,476	69,165	70,230	71,562	73,113	75,510	79,025	78,285
Federal	1,338	1,316	1,471	1,443	1,386	1,429	989	1,240
DOD	na	na	na	na	na	na	na	na
DOE	48	58	78	80	49	49	57	72
HHS	324	268	311	325	277	295	40	61
NIH	283	245	273	290	259	273	na	na
Other HHS	41	23	38	35	18	22	40	61

TABLE 40. Full-time graduate students in science and engineering fields in all institutions, by primary mechanism and primary source of support: 2003–09

Primary mechanism and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
NASA	34	31	51	46	35	35	37	46
NSF	286	285	381	412	339	339	358	343
USDA	80	67	53	73	71	71	56	45
Other	566	607	597	507	615	640	441	673
Institutional	67,091	66,890	67,809	69,182	70,536	72,859	76,960	75,895
Other nonfederal	1,047	959	950	937	1,191	1,222	1,076	1,150
Domestic	1,047	959	950	937	1,191	1,222	972	1,048
Foreign	na	na	na	na	na	na	104	102
Self-support	na	na	na	na	na	na	na	na
Traineeships	10,169	9,892	9,946	9,801	9,395	9,707	9,997	9,989
Federal	5,916	5,882	6,011	5,951	5,447	5,660	5,918	6,273
DOD	39	45	63	76	82	83	102	92
DOE	5	25	35	64	18	18	8	4
HHS	4,794	4,864	4,982	4,891	4,618	4,809	4,938	5,268
NIH	4,654	4,731	4,837	4,776	4,508	4,698	4,786	5,140
Other HHS	140	133	145	115	110	111	152	128
NASA	56	48	56	50	36	36	45	27
NSF	333	406	377	368	294	294	489	569
USDA	14	16	23	23	21	21	15	19
Other	675	478	475	479	378	399	321	294
Institutional	3,661	3,479	3,324	3,362	3,419	3,516	3,586	3,266
Other nonfederal	592	531	611	488	529	531	493	450
Domestic	504	429	549	420	447	449	447	405
Foreign	88	102	62	68	82	82	46	45
Self-support	na	na	na	na	na	na	na	na
Other types of support	120,309	121,799	121,270	127,569	138,003	141,738	147,137	159,271
Federal	3,773	4,371	4,444	5,100	4,202	4,257	3,872	4,070
DOD	1,599	1,977	2,159	2,153	1,870	1,871	1,177	1,202
DOE	45	56	38	42	18	19	43	41
HHS	631	676	696	901	616	619	758	738
NIH	547	608	614	817	587	591	728	720
Other HHS	84	68	82	84	29	28	30	18
NASA	45	22	38	37	29	29	22	37
NSF	197	190	206	258	222	221	187	247
USDA	90	75	63	127	119	119	98	88
Other	1,166	1,375	1,244	1,582	1,328	1,379	1,587	1,717
Institutional	12,126	13,534	12,999	14,298	15,911	16,275	16,136	17,750
Other nonfederal	3,708	3,336	3,328	3,150	3,216	3,257	3,075	3,258
Domestic	2,700	2,395	2,525	2,371	2,532	2,570	2,265	2,300
Foreign	1,008	941	803	779	684	687	810	958
Self-support	100,702	100,558	100,499	105,021	114,674	117,949	124,054	134,193

na = not applicable.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 41. Full-time graduate students in health fields in all institutions, by primary mechanism and primary source of support: 2003–09

Primary mechanism and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All sources	58,392	62,044	64,878	69,213	67,884	65,823	66,053	57,617
Federal	9,433	9,648	9,187	9,635	8,891	8,057	6,937	5,808
DOD	296	329	348	365	340	329	316	238
DOE	13	16	16	27	36	34	24	14
HHS	6,989	7,178	6,829	6,868	6,379	5,591	4,495	3,973
NIH	3,868	4,306	4,067	4,257	4,333	3,543	3,119	2,936
Other HHS	3,121	2,872	2,762	2,611	2,046	2,048	1,376	1,037
NASA	13	25	20	14	8	7	8	3
NSF	148	169	208	283	222	198	206	169
USDA	78	84	87	98	75	89	68	81
Other	1,896	1,847	1,679	1,980	1,831	1,809	1,820	1,330
Institutional	12,180	13,240	14,044	14,809	16,433	15,845	15,167	13,544
Other nonfederal	2,751	2,636	2,743	3,184	2,941	2,841	2,345	2,502
Domestic	2,421	2,381	2,539	2,998	2,690	2,595	2,083	2,210
Foreign	330	255	204	186	251	246	262	292
Self-support	34,028	36,520	38,904	41,585	39,619	39,080	41,604	35,763
Fellowships	2,680	2,850	2,857	3,030	3,485	3,044	2,772	2,659
Federal	629	716	713	785	1,022	798	697	630
DOD	21	36	23	39	49	43	50	20
DOE	1	1	3	7	7	5	3	0
HHS	446	516	464	507	636	456	394	403
NIH	366	412	363	439	591	413	333	352
Other HHS	80	104	101	68	45	43	61	51
NASA	4	4	2	1	2	2	2	1
NSF	54	76	81	92	103	76	73	45
USDA	4	5	0	0	3	2	0	0
Other	99	78	140	139	222	214	175	161
Institutional	1,534	1,659	1,712	1,780	2,027	1,847	1,683	1,626
Other nonfederal	517	475	432	465	436	399	392	403
Domestic	398	405	393	415	357	326	312	306
Foreign	119	70	39	50	79	73	80	97
Self-support	na	na	na	na	na	na	na	na
Research assistantships	6,962	7,279	7,565	7,563	7,582	7,043	6,775	6,762
Federal	2,933	3,209	3,141	3,180	3,188	2,789	2,422	2,368
DOD	70	95	87	59	58	54	64	59
DOE	12	15	12	15	19	19	20	14
HHS	2,323	2,624	2,572	2,552	2,595	2,191	1,873	1,819
NIH	2,010	2,320	2,276	2,298	2,314	1,909	1,699	1,637
Other HHS	313	304	296	254	281	282	174	182
NASA	4	16	11	6	4	3	4	0
NSF	61	50	85	111	99	101	119	103
USDA	72	74	77	91	64	78	65	76
Other	391	335	297	346	349	343	277	297
Institutional	3,312	3,395	3,647	3,540	3,572	3,489	3,606	3,658
Other nonfederal	717	675	777	843	822	765	747	736
Domestic	684	642	737	811	775	716	696	700
Foreign	33	33	40	32	47	49	51	36
Self-support	na	na	na	na	na	na	na	na
Teaching assistantships	3,629	3,844	4,008	4,349	4,704	4,438	4,110	3,543
Federal	193	217	125	216	188	180	41	46
DOD	na	na	na	na	na	na	na	na
DOE	0	0	0	4	1	1	0	0
HHS	57	75	46	88	129	119	22	15
NIH	31	56	40	42	46	33	na	na
Other HHS	26	19	6	46	83	86	22	15

TABLE 41. Full-time graduate students in health fields in all institutions, by primary mechanism and primary source of support: 2003–09

Primary mechanism and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
NASA	1	0	0	0	0	0	0	0
NSF	5	0	1	1	2	2	2	3
USDA	0	2	3	3	1	2	1	1
Other	130	140	75	120	55	56	16	27
Institutional	3,295	3,503	3,758	4,017	4,381	4,126	3,946	3,395
Other nonfederal	141	124	125	116	135	132	123	102
Domestic	141	124	125	116	135	132	120	100
Foreign	na	na	na	na	na	na	3	2
Self-support	na	na	na	na	na	na	na	na
Traineeships	4,957	5,011	4,624	4,770	4,042	3,790	3,320	2,841
Federal	4,174	4,034	3,720	3,803	3,162	2,964	2,291	1,795
DOD	3	4	6	4	42	41	30	17
DOE	0	0	0	0	1	1	0	0
HHS	3,589	3,453	3,153	3,129	2,519	2,328	1,815	1,420
NIH	1,256	1,282	1,102	1,179	1,090	900	805	722
Other HHS	2,333	2,171	2,051	1,950	1,429	1,428	1,010	698
NASA	2	3	6	7	0	0	0	0
NSF	25	36	33	24	18	18	5	12
USDA	0	0	0	0	1	1	0	1
Other	555	538	522	639	581	575	441	345
Institutional	648	815	735	771	682	628	852	880
Other nonfederal	135	162	169	196	198	198	177	166
Domestic	77	111	163	160	163	163	143	129
Foreign	58	51	6	36	35	35	34	37
Self-support	na	na	na	na	na	na	na	na
Other types of support	40,164	43,060	45,824	49,501	48,071	47,508	49,076	41,812
Federal	1,504	1,472	1,488	1,651	1,331	1,326	1,486	969
DOD	202	194	232	263	191	191	172	142
DOE	0	0	1	1	8	8	1	0
HHS	574	510	594	592	500	497	391	316
NIH	205	236	286	299	292	288	282	225
Other HHS	369	274	308	293	208	209	109	91
NASA	2	2	1	0	2	2	2	2
NSF	3	7	8	55	0	1	7	6
USDA	2	3	7	4	6	6	2	3
Other	721	756	645	736	624	621	911	500
Institutional	3,391	3,868	4,192	4,701	5,771	5,755	5,080	3,985
Other nonfederal	1,241	1,200	1,240	1,564	1,350	1,347	906	1,095
Domestic	1,121	1,099	1,121	1,496	1,260	1,258	812	975
Foreign	120	101	119	68	90	89	94	120
Self-support	34,028	36,520	38,904	41,585	39,619	39,080	41,604	35,763

na = not applicable.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 42. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	107,715	106,544	110,219	116,482	120,236	122,449	130,635	134,756
Science and engineering	89,331	86,565	89,038	94,413	98,205	100,990	108,819	115,755
Science	64,902	64,540	66,665	68,537	70,387	72,725	78,227	83,252
Agricultural sciences	2,424	2,316	2,260	2,206	2,313	2,356	2,597	2,994
Biological sciences	12,719	12,796	12,918	13,055	13,485	13,749	14,528	15,443
Anatomy	178	180	213	213	252	194	146	181
Biochemistry	958	907	930	992	945	945	966	949
Biology	2,610	2,740	2,826	2,994	3,083	3,005	3,221	3,421
Biometry/epidemiology	1,022	986	1,069	974	1,126	1,171	1,147	1,198
Biophysics	223	210	174	186	197	183	199	161
Botany	307	336	316	318	333	331	304	340
Cell biology	1,125	1,140	1,208	1,294	1,249	1,254	1,372	1,461
Ecology	345	302	314	294	361	337	355	285
Entomology/parasitology	175	211	153	169	161	161	167	193
Genetics	373	441	365	348	330	319	370	405
Microbiology/immunology/virology	909	889	868	853	741	724	772	799
Nutrition	895	843	863	905	1,121	1,035	1,110	1,121
Pathology	256	277	248	269	257	266	321	266
Pharmacology	552	510	466	469	437	437	487	577
Physiology	760	731	678	597	603	669	690	751
Zoology	258	212	199	179	165	215	145	133
Biological sciences, nec	1,773	1,881	2,028	2,001	2,124	2,503	2,756	3,202
Communication ^a	ne	ne	ne	ne	ne	1,531	1,912	2,119
Computer sciences	8,134	7,783	8,258	8,983	9,352	9,256	10,434	10,557
Earth, atmospheric, and ocean sciences	3,104	2,926	2,758	2,795	2,861	2,749	2,904	3,153
Atmospheric sciences	268	228	228	207	233	243	263	250
Geosciences	1,412	1,336	1,308	1,348	1,410	1,405	1,429	1,682
Oceanography	567	534	463	457	412	402	466	517
Earth/atmospheric/ocean sciences, nec	857	828	759	783	806	699	746	704
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	492	579	633
Mathematical sciences	4,185	4,252	4,196	4,342	4,595	4,432	4,591	4,888
Mathematics/applied mathematics	3,266	3,365	3,263	3,398	3,518	3,352	3,409	3,611
Statistics	919	887	933	944	1,077	1,080	1,182	1,277
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	771	1,140	1,412
Neuroscience ^a	na	na	na	na	na	273	304	395
Physical sciences	6,841	6,603	6,657	6,626	6,787	6,711	6,892	7,276
Astronomy	225	210	190	204	207	207	225	250
Chemistry	3,983	3,862	3,904	3,900	3,972	3,938	4,161	4,331
Physics	2,543	2,442	2,458	2,409	2,534	2,523	2,406	2,571
Physical sciences, nec	90	89	105	113	74	43	100	124
Psychology	8,858	9,478	10,358	10,224	10,624	10,476	11,082	10,980
Clinical psychology	1,986	2,251	2,318	2,201	2,232	2,227	2,064	2,136
Psychology, general	2,977	2,946	3,385	3,374	3,536	3,438	3,635	3,300
Psychology, nec	3,895	4,281	4,655	4,649	4,856	4,811	5,383	5,544
Social sciences	18,637	18,386	19,260	20,306	20,370	19,929	21,264	23,402
Agricultural economics	536	523	557	543	516	491	573	610
Anthropology (cultural/social)	1,279	1,187	1,243	1,314	1,305	1,310	1,444	1,452
Economics (except agricultural)	2,921	2,686	2,724	2,907	3,108	3,179	3,263	3,855
Geography	915	860	898	845	897	897	1,013	1,017
History and philosophy of science	107	107	138	121	163	151	205	119
Linguistics	588	570	633	577	580	535	557	632

TABLE 42. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	6,950	7,333	7,807	8,319	7,749	7,627	8,152	9,736
Sociology	1,543	1,359	1,499	1,353	1,647	1,610	1,795	1,671
Sociology/anthropology	179	178	173	151	136	120	93	90
Social sciences, nec	3,619	3,583	3,588	4,176	4,269	4,009	4,169	4,220
Engineering	24,429	22,025	22,373	25,876	27,818	28,265	30,592	32,503
Aerospace engineering	845	834	804	943	962	962	1,116	1,176
Agricultural engineering	197	177	190	222	224	224	256	296
Architecture ^a	na	na	na	na	na	1,533	1,979	2,273
Biomedical engineering	1,327	1,274	1,267	1,472	1,559	1,565	1,648	1,833
Chemical engineering	1,600	1,392	1,293	1,429	1,532	1,566	1,713	1,910
Civil engineering ^a	4,363	4,175	4,057	4,198	4,926	3,662	4,073	4,878
Electrical engineering	7,834	6,633	6,987	8,668	8,887	8,920	9,042	8,831
Engineering science	392	361	317	321	331	339	398	309
Industrial engineering	2,029	1,724	1,674	2,148	2,445	2,626	3,015	2,908
Mechanical engineering	3,476	3,129	3,225	3,734	3,941	3,937	4,297	4,814
Metallurgical/materials engineering	958	926	992	1,043	1,089	1,086	1,170	1,302
Mining engineering	73	64	58	50	58	33	48	45
Nuclear engineering	177	192	193	206	239	237	259	265
Petroleum engineering	166	151	161	174	220	220	261	306
Engineering, nec	992	993	1,155	1,268	1,405	1,355	1,317	1,357
Health	18,384	19,979	21,181	22,069	22,031	21,459	21,816	19,001
Clinical medicine	4,727	4,728	4,626	5,280	5,701	5,225	6,213	6,141
Anesthesiology	246	186	251	358	189	189	209	124
Cardiology	4	9	4	3	22	22	2	9
Endocrinology	9	4	10	7	7	7	20	8
Gastroenterology	6	4	3	0	0	0	3	1
Hematology	4	3	0	1	3	3	5	1
Neurology ^a	452	426	425	454	567	283	216	244
Obstetrics/gynecology	0	3	4	9	30	30	28	29
Oncology/cancer research	30	52	43	45	42	34	34	47
Ophthalmology	60	76	80	92	83	80	0	0
Otorhinolaryngology	0	1	0	0	2	2	0	0
Pediatrics	131	125	100	110	88	88	62	49
Preventive medicine/community health	3,082	3,132	2,894	3,355	3,784	3,839	4,771	4,898
Psychiatry	27	41	34	32	12	12	30	38
Pulmonary disease	0	0	0	0	1	1	3	0
Radiology	55	36	48	60	70	74	74	87
Surgery	7	7	5	11	5	4	4	6
Clinical medicine, nec	614	623	725	743	796	557	752	600
Other health	13,657	15,251	16,555	16,789	16,330	16,234	15,603	12,860
Dental sciences	396	449	429	402	364	389	410	475
Nursing	3,083	3,352	3,948	3,944	3,953	3,950	3,584	2,315
Pharmaceutical sciences	537	1,024	1,246	1,036	712	732	691	756
Speech pathology/audiology	4,110	4,303	4,496	4,491	4,626	4,620	4,691	4,683
Veterinary sciences	374	324	343	378	478	524	439	342
Other health, nec	5,157	5,799	6,093	6,538	6,197	6,019	5,788	4,289

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 43. First-time, full-time U.S. citizen and permanent resident graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	76,478	77,169	79,531	81,142	82,127	83,932	87,812	92,275
Science and engineering	59,649	58,853	60,157	60,978	62,009	64,284	68,093	75,321
Science	47,386	47,665	49,252	49,231	50,005	52,017	54,748	59,733
Agricultural sciences	1,971	1,870	1,828	1,764	1,837	1,848	1,996	2,359
Biological sciences	9,763	9,808	9,925	9,946	10,230	10,507	10,870	11,825
Anatomy	138	156	186	179	221	169	125	154
Biochemistry	627	564	601	669	649	639	600	617
Biology	2,139	2,248	2,247	2,340	2,304	2,257	2,403	2,642
Biometry/epidemiology	706	709	779	700	784	802	835	785
Biophysics	154	146	128	125	144	133	131	120
Botany	231	218	208	196	201	200	182	214
Cell biology	822	827	893	978	912	923	955	1,088
Ecology	291	261	282	256	323	303	308	247
Entomology/parasitology	142	163	118	125	125	125	128	145
Genetics	283	338	280	250	243	238	263	312
Microbiology/immunology/virology	718	671	681	708	614	598	612	656
Nutrition	678	614	651	688	875	823	860	903
Pathology	194	227	198	218	222	233	253	218
Pharmacology	415	385	323	353	326	323	331	426
Physiology	640	645	596	534	533	597	594	644
Zoology	221	182	161	153	133	183	120	113
Biological sciences, nec	1,364	1,454	1,593	1,474	1,621	1,961	2,170	2,541
Communication ^a	ne	ne	ne	ne	ne	1,229	1,489	1,677
Computer sciences	3,891	3,632	3,632	3,382	3,077	3,034	3,324	3,659
Earth, atmospheric, and ocean sciences	2,573	2,468	2,270	2,289	2,364	2,271	2,306	2,533
Atmospheric sciences	220	186	172	170	189	195	209	199
Geosciences	1,129	1,102	1,073	1,068	1,136	1,139	1,119	1,323
Oceanography	485	476	376	380	354	345	382	424
Earth/atmospheric/ocean sciences, nec	739	704	649	671	685	592	596	587
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	456	515	576
Mathematical sciences	2,527	2,632	2,561	2,522	2,629	2,561	2,548	2,808
Mathematics/applied mathematics	2,106	2,222	2,163	2,113	2,233	2,159	2,103	2,298
Statistics	421	410	398	409	396	402	445	510
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	584	859	1,131
Neuroscience ^a	na	na	na	na	na	180	259	334
Physical sciences	4,091	4,026	4,138	4,045	4,146	4,089	3,988	4,424
Astronomy	150	145	144	142	136	136	146	191
Chemistry	2,438	2,391	2,461	2,405	2,453	2,434	2,453	2,683
Physics	1,442	1,416	1,439	1,406	1,498	1,487	1,315	1,455
Physical sciences, nec	61	74	94	92	59	32	74	95
Psychology	8,285	8,944	9,800	9,645	9,985	9,861	10,407	10,347
Clinical psychology	1,898	2,167	2,227	2,107	2,138	2,136	1,984	2,062
Psychology, general	2,762	2,744	3,189	3,170	3,298	3,207	3,401	3,077
Psychology, nec	3,625	4,033	4,384	4,368	4,549	4,518	5,022	5,208
Social sciences	14,285	14,285	15,098	15,638	15,737	15,397	16,187	18,060
Agricultural economics	321	319	343	305	298	281	315	342
Anthropology (cultural/social)	1,142	1,068	1,131	1,170	1,144	1,149	1,280	1,325
Economics (except agricultural)	1,373	1,270	1,251	1,329	1,393	1,450	1,441	1,871
Geography	741	731	759	706	779	779	813	814
History and philosophy of science	95	97	115	109	147	140	183	106

TABLE 43. First-time, full-time U.S. citizen and permanent resident graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Linguistics	405	381	440	417	403	370	361	419
Political science	5,561	5,974	6,475	6,670	6,298	6,206	6,584	7,926
Sociology	1,340	1,204	1,320	1,203	1,442	1,409	1,609	1,450
Sociology/anthropology	161	153	154	136	120	104	80	81
Social sciences, nec	3,146	3,088	3,110	3,593	3,713	3,509	3,521	3,726
Engineering	12,263	11,188	10,905	11,747	12,004	12,267	13,345	15,588
Aerospace engineering	536	537	508	616	592	592	707	753
Agricultural engineering	118	96	94	104	110	110	115	149
Architecture ^a	na	na	na	na	na	1,214	1,578	1,839
Biomedical engineering	879	841	821	951	951	957	1,012	1,220
Chemical engineering	852	733	624	684	679	695	711	927
Civil engineering ^a	2,595	2,591	2,492	2,650	3,188	2,188	2,335	3,017
Electrical engineering	3,127	2,458	2,430	2,305	2,125	2,129	2,223	2,295
Engineering science	231	225	177	173	173	179	176	143
Industrial engineering	832	755	690	933	813	901	1,030	1,121
Mechanical engineering	1,843	1,684	1,668	1,889	1,858	1,854	1,959	2,477
Metallurgical/materials engineering	479	454	482	545	511	514	534	592
Mining engineering	38	37	35	25	38	20	26	25
Nuclear engineering	114	138	143	160	181	180	197	198
Petroleum engineering	25	46	26	20	38	38	25	47
Engineering, nec	594	593	715	692	747	696	717	785
Health	16,829	18,316	19,374	20,164	20,118	19,648	19,719	16,954
Clinical medicine	4,050	4,059	4,006	4,563	4,848	4,468	5,358	5,283
Anesthesiology	238	186	249	356	188	188	209	123
Cardiology	2	6	2	2	21	21	2	7
Endocrinology	5	4	10	6	4	4	19	6
Gastroenterology	6	4	3	0	0	0	2	1
Hematology	3	3	0	1	2	2	4	1
Neurology ^a	371	358	345	361	432	240	168	202
Obstetrics/gynecology	0	2	0	8	22	22	26	24
Oncology/cancer research	26	42	34	36	37	29	28	38
Ophthalmology	59	72	78	89	79	79	0	0
Otorhinolaryngology	0	1	0	0	2	2	0	0
Pediatrics	116	109	77	94	79	79	52	41
Preventive medicine/community health	2,595	2,631	2,459	2,817	3,155	3,198	4,050	4,196
Psychiatry	27	38	34	30	11	11	29	36
Pulmonary disease	0	0	0	0	1	1	3	0
Radiology	46	29	41	48	64	68	60	64
Surgery	7	6	4	11	5	4	4	6
Clinical medicine, nec	549	568	670	704	746	520	702	538
Other health	12,779	14,257	15,368	15,601	15,270	15,180	14,361	11,671
Dental sciences	325	397	354	330	287	307	338	348
Nursing	3,003	3,282	3,857	3,863	3,854	3,851	3,463	2,231
Pharmaceutical sciences	294	656	821	639	383	398	259	306

TABLE 43. First-time, full-time U.S. citizen and permanent resident graduate students in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	4,000	4,183	4,365	4,344	4,497	4,493	4,543	4,563
Veterinary sciences	313	260	274	304	410	441	330	249
Other health, nec	4,844	5,479	5,697	6,121	5,839	5,690	5,428	3,974

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 44. First-time, full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	31,237	29,375	30,688	35,340	38,109	38,517	42,823	42,481
Science and engineering	29,682	27,712	28,881	33,435	36,196	36,706	40,726	40,434
Science	17,516	16,875	17,413	19,306	20,382	20,708	23,479	23,519
Agricultural sciences	453	446	432	442	476	508	601	635
Biological sciences	2,956	2,988	2,993	3,109	3,255	3,242	3,658	3,618
Anatomy	40	24	27	34	31	25	21	27
Biochemistry	331	343	329	323	296	306	366	332
Biology	471	492	579	654	779	748	818	779
Biometry/epidemiology	316	277	290	274	342	369	312	413
Biophysics	69	64	46	61	53	50	68	41
Botany	76	118	108	122	132	131	122	126
Cell biology	303	313	315	316	337	331	417	373
Ecology	54	41	32	38	38	34	47	38
Entomology/parasitology	33	48	35	44	36	36	39	48
Genetics	90	103	85	98	87	81	107	93
Microbiology/immunology/virology	191	218	187	145	127	126	160	143
Nutrition	217	229	212	217	246	212	250	218
Pathology	62	50	50	51	35	33	68	48
Pharmacology	137	125	143	116	111	114	156	151
Physiology	120	86	82	63	70	72	96	107
Zoology	37	30	38	26	32	32	25	20
Biological sciences, nec	409	427	435	527	503	542	586	661
Communication ^a	ne	ne	ne	ne	ne	302	423	442
Computer sciences	4,243	4,151	4,626	5,601	6,275	6,222	7,110	6,898
Earth, atmospheric, and ocean sciences	531	458	488	506	497	478	598	620
Atmospheric sciences	48	42	56	37	44	48	54	51
Geosciences	283	234	235	280	274	266	310	359
Oceanography	82	58	87	77	58	57	84	93
Earth/atmospheric/ocean sciences, nec	118	124	110	112	121	107	150	117
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	36	64	57
Mathematical sciences	1,658	1,620	1,635	1,820	1,966	1,871	2,043	2,080
Mathematics/applied mathematics	1,160	1,143	1,100	1,285	1,285	1,193	1,306	1,313
Statistics	498	477	535	535	681	678	737	767
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	187	281	281
Neuroscience ^a	na	na	na	na	na	93	45	61
Physical sciences	2,750	2,577	2,519	2,581	2,641	2,622	2,904	2,852
Astronomy	75	65	46	62	71	71	79	59
Chemistry	1,545	1,471	1,443	1,495	1,519	1,504	1,708	1,648
Physics	1,101	1,026	1,019	1,003	1,036	1,036	1,091	1,116
Physical sciences, nec	29	15	11	21	15	11	26	29
Psychology	573	534	558	579	639	615	675	633
Clinical psychology	88	84	91	94	94	91	80	74
Psychology, general	215	202	196	204	238	231	234	223
Psychology, nec	270	248	271	281	307	293	361	336
Social sciences	4,352	4,101	4,162	4,668	4,633	4,532	5,077	5,342
Agricultural economics	215	204	214	238	218	210	258	268
Anthropology (cultural/social)	137	119	112	144	161	161	164	127
Economics (except agricultural)	1,548	1,416	1,473	1,578	1,715	1,729	1,822	1,984
Geography	174	129	139	139	118	118	200	203
History and philosophy of science	12	10	23	12	16	11	22	13
Linguistics	183	189	193	160	177	165	196	213

TABLE 44. First-time, full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	1,389	1,359	1,332	1,649	1,451	1,421	1,568	1,810
Sociology	203	155	179	150	205	201	186	221
Sociology/anthropology	18	25	19	15	16	16	13	9
Social sciences, nec	473	495	478	583	556	500	648	494
Engineering	12,166	10,837	11,468	14,129	15,814	15,998	17,247	16,915
Aerospace engineering	309	297	296	327	370	370	409	423
Agricultural engineering	79	81	96	118	114	114	141	147
Architecture ^a	na	na	na	na	na	319	401	434
Biomedical engineering	448	433	446	521	608	608	636	613
Chemical engineering	748	659	669	745	853	871	1,002	983
Civil engineering ^a	1,768	1,584	1,565	1,548	1,738	1,474	1,738	1,861
Electrical engineering	4,707	4,175	4,557	6,363	6,762	6,791	6,819	6,536
Engineering science	161	136	140	148	158	160	222	166
Industrial engineering	1,197	969	984	1,215	1,632	1,725	1,985	1,787
Mechanical engineering	1,633	1,445	1,557	1,845	2,083	2,083	2,338	2,337
Metallurgical/materials engineering	479	472	510	498	578	572	636	710
Mining engineering	35	27	23	25	20	13	22	20
Nuclear engineering	63	54	50	46	58	57	62	67
Petroleum engineering	141	105	135	154	182	182	236	259
Engineering, nec	398	400	440	576	658	659	600	572
Health	1,555	1,663	1,807	1,905	1,913	1,811	2,097	2,047
Clinical medicine	677	669	620	717	853	757	855	858
Anesthesiology	8	0	2	2	1	1	0	1
Cardiology	2	3	2	1	1	1	0	2
Endocrinology	4	0	0	1	3	3	1	2
Gastroenterology	0	0	0	0	0	0	1	0
Hematology	1	0	0	0	1	1	1	0
Neurology ^a	81	68	80	93	135	43	48	42
Obstetrics/gynecology	0	1	4	1	8	8	2	5
Oncology/cancer research	4	10	9	9	5	5	6	9
Ophthalmology	1	4	2	3	4	1	0	0
Otorhinolaryngology	0	0	0	0	0	0	0	0
Pediatrics	15	16	23	16	9	9	10	8
Preventive medicine/community health	487	501	435	538	629	641	721	702
Psychiatry	0	3	0	2	1	1	1	2
Pulmonary disease	0	0	0	0	0	0	0	0
Radiology	9	7	7	12	6	6	14	23
Surgery	0	1	1	0	0	0	0	0
Clinical medicine, nec	65	55	55	39	50	37	50	62
Other health	878	994	1,187	1,188	1,060	1,054	1,242	1,189
Dental sciences	71	52	75	72	77	82	72	127
Nursing	80	70	91	81	99	99	121	84
Pharmaceutical sciences	243	368	425	397	329	334	432	450

TABLE 44. First-time, full-time graduate students with temporary visas in science, engineering, and health fields in all institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	110	120	131	147	129	127	148	120
Veterinary sciences	61	64	69	74	68	83	109	93
Other health, nec	313	320	396	417	358	329	360	315

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 45. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	107,715	106,544	110,219	116,482	120,236	122,449	130,635	134,756
U.S. citizens and permanent residents	76,478	77,169	79,531	81,142	82,127	83,932	87,812	92,275
American Indian/Alaska Native	403	430	423	479	497	506	595	582
Asian/Pacific Islander	7,107	7,089	7,274	7,453	7,262	7,333	7,669	8,174
Black, non-Hispanic	4,897	5,420	5,447	5,558	5,574	5,734	6,461	6,656
Hispanic	4,462	4,553	5,037	5,268	5,414	5,511	5,811	6,348
White, non-Hispanic	53,560	53,333	54,349	55,020	55,448	56,711	58,768	61,329
Other or unknown	6,049	6,344	7,001	7,364	7,932	8,137	8,508	9,186
Temporary visa holders	31,237	29,375	30,688	35,340	38,109	38,517	42,823	42,481
Science and engineering	89,331	86,565	89,038	94,413	98,205	100,990	108,819	115,755
U.S. citizens and permanent residents	59,649	58,853	60,157	60,978	62,009	64,284	68,093	75,321
American Indian/Alaska Native	318	342	332	390	377	388	463	487
Asian/Pacific Islander	5,788	5,566	5,621	5,761	5,682	5,811	6,103	6,784
Black, non-Hispanic	3,584	3,832	3,929	4,006	4,042	4,206	4,769	5,225
Hispanic	3,313	3,421	3,802	3,928	4,038	4,156	4,586	5,183
White, non-Hispanic	41,619	40,617	40,955	40,988	41,478	42,962	45,177	49,722
Other or unknown	5,027	5,075	5,518	5,905	6,392	6,761	6,995	7,920
Temporary visa holders	29,682	27,712	28,881	33,435	36,196	36,706	40,726	40,434
Science	64,902	64,540	66,665	68,537	70,387	72,725	78,227	83,252
U.S. citizens and permanent residents	47,386	47,665	49,252	49,231	50,005	52,017	54,748	59,733
American Indian/Alaska Native	267	299	293	331	331	339	401	417
Asian/Pacific Islander	3,851	3,966	4,080	4,066	3,956	4,056	4,279	4,770
Black, non-Hispanic	3,080	3,316	3,405	3,394	3,462	3,608	4,151	4,539
Hispanic	2,634	2,772	3,153	3,215	3,355	3,460	3,759	4,185
White, non-Hispanic	33,551	33,008	33,725	33,440	33,656	34,962	36,516	39,601
Other or unknown	4,003	4,304	4,596	4,785	5,245	5,592	5,642	6,221
Temporary visa holders	17,516	16,875	17,413	19,306	20,382	20,708	23,479	23,519
Agricultural sciences	2,424	2,316	2,260	2,206	2,313	2,356	2,597	2,994
U.S. citizens and permanent residents	1,971	1,870	1,828	1,764	1,837	1,848	1,996	2,359
American Indian/Alaska Native	15	20	14	16	14	16	25	23
Asian/Pacific Islander	55	59	64	55	60	63	74	84
Black, non-Hispanic	105	74	104	67	55	56	60	84
Hispanic	78	93	86	95	95	95	117	149
White, non-Hispanic	1,638	1,528	1,457	1,421	1,474	1,481	1,582	1,861
Other or unknown	80	96	103	110	139	137	138	158
Temporary visa holders	453	446	432	442	476	508	601	635
Biological sciences	12,719	12,796	12,918	13,055	13,485	13,749	14,528	15,443
U.S. citizens and permanent residents	9,763	9,808	9,925	9,946	10,230	10,507	10,870	11,825
American Indian/Alaska Native	56	44	44	68	57	58	75	63
Asian/Pacific Islander	1,126	1,224	1,195	1,230	1,199	1,238	1,255	1,480
Black, non-Hispanic	503	612	613	604	661	670	661	818
Hispanic	537	544	632	630	605	620	752	766
White, non-Hispanic	6,928	6,811	6,742	6,731	6,937	7,006	7,149	7,594
Other or unknown	613	573	699	683	771	915	978	1,104
Temporary visa holders	2,956	2,988	2,993	3,109	3,255	3,242	3,658	3,618
Communication ^a	ne	ne	ne	ne	ne	1,531	1,912	2,119
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	1,229	1,489	1,677
American Indian/Alaska Native	ne	ne	ne	ne	ne	7	5	11
Asian/Pacific Islander	ne	ne	ne	ne	ne	50	75	83
Black, non-Hispanic	ne	ne	ne	ne	ne	103	140	130
Hispanic	ne	ne	ne	ne	ne	68	102	102
White, non-Hispanic	ne	ne	ne	ne	ne	872	1,052	1,183
Other or unknown	ne	ne	ne	ne	ne	129	115	168
Temporary visa holders	ne	ne	ne	ne	ne	302	423	442

TABLE 45. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Computer sciences	8,134	7,783	8,258	8,983	9,352	9,256	10,434	10,557
U.S. citizens and permanent residents	3,891	3,632	3,632	3,382	3,077	3,034	3,324	3,659
American Indian/Alaska Native	13	13	11	16	11	11	20	21
Asian/Pacific Islander	736	645	608	516	466	460	501	552
Black, non-Hispanic	207	221	206	193	186	185	219	283
Hispanic	121	142	149	147	143	141	147	190
White, non-Hispanic	2,399	2,159	2,240	2,097	1,771	1,743	1,991	2,161
Other or unknown	415	452	418	413	500	494	446	452
Temporary visa holders	4,243	4,151	4,626	5,601	6,275	6,222	7,110	6,898
Earth, atmospheric, and ocean sciences	3,104	2,926	2,758	2,795	2,861	2,749	2,904	3,153
U.S. citizens and permanent residents	2,573	2,468	2,270	2,289	2,364	2,271	2,306	2,533
American Indian/Alaska Native	7	19	13	17	17	15	16	15
Asian/Pacific Islander	66	83	73	81	83	77	85	80
Black, non-Hispanic	51	38	48	42	52	50	52	55
Hispanic	87	93	90	100	106	102	105	126
White, non-Hispanic	2,175	2,069	1,917	1,904	1,944	1,874	1,865	2,021
Other or unknown	187	166	129	145	162	153	183	236
Temporary visa holders	531	458	488	506	497	478	598	620
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	492	579	633
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	456	515	576
American Indian/Alaska Native	ne	ne	ne	ne	ne	2	3	1
Asian/Pacific Islander	ne	ne	ne	ne	ne	17	20	26
Black, non-Hispanic	ne	ne	ne	ne	ne	50	49	58
Hispanic	ne	ne	ne	ne	ne	22	19	28
White, non-Hispanic	ne	ne	ne	ne	ne	333	372	432
Other or unknown	ne	ne	ne	ne	ne	32	52	31
Temporary visa holders	ne	ne	ne	ne	ne	36	64	57
Mathematical sciences	4,185	4,252	4,196	4,342	4,595	4,432	4,591	4,888
U.S. citizens and permanent residents	2,527	2,632	2,561	2,522	2,629	2,561	2,548	2,808
American Indian/Alaska Native	5	9	6	16	10	9	12	9
Asian/Pacific Islander	269	282	267	288	252	233	271	281
Black, non-Hispanic	130	141	133	128	141	140	129	123
Hispanic	97	96	115	105	131	128	118	157
White, non-Hispanic	1,848	1,913	1,866	1,796	1,831	1,794	1,832	2,012
Other or unknown	178	191	174	189	264	257	186	226
Temporary visa holders	1,658	1,620	1,635	1,820	1,966	1,871	2,043	2,080
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	771	1,140	1,412
U.S. citizens and permanent residents	ne	ne	ne	ne	ne	584	859	1,131
American Indian/Alaska Native	ne	ne	ne	ne	ne	4	3	11
Asian/Pacific Islander	ne	ne	ne	ne	ne	38	53	69
Black, non-Hispanic	ne	ne	ne	ne	ne	33	53	80
Hispanic	ne	ne	ne	ne	ne	20	62	73
White, non-Hispanic	ne	ne	ne	ne	ne	383	515	682
Other or unknown	ne	ne	ne	ne	ne	106	173	216
Temporary visa holders	ne	ne	ne	ne	ne	187	281	281
Neuroscience ^a	na	na	na	na	na	273	304	395
U.S. citizens and permanent residents	na	na	na	na	na	180	259	334
American Indian/Alaska Native	na	na	na	na	na	1	3	1
Asian/Pacific Islander	na	na	na	na	na	20	29	44
Black, non-Hispanic	na	na	na	na	na	7	8	16
Hispanic	na	na	na	na	na	7	14	21
White, non-Hispanic	na	na	na	na	na	126	178	217
Other or unknown	na	na	na	na	na	19	27	35
Temporary visa holders	na	na	na	na	na	93	45	61

TABLE 45. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Physical sciences	6,841	6,603	6,657	6,626	6,787	6,711	6,892	7,276
U.S. citizens and permanent residents	4,091	4,026	4,138	4,045	4,146	4,089	3,988	4,424
American Indian/Alaska Native	14	16	16	31	16	15	21	27
Asian/Pacific Islander	293	306	326	351	327	321	319	332
Black, non-Hispanic	186	193	168	154	182	181	183	195
Hispanic	217	209	208	204	217	215	213	226
White, non-Hispanic	3,113	3,034	3,175	2,981	3,108	3,066	2,960	3,302
Other or unknown	268	268	245	324	296	291	292	342
Temporary visa holders	2,750	2,577	2,519	2,581	2,641	2,622	2,904	2,852
Psychology	8,858	9,478	10,358	10,224	10,624	10,476	11,082	10,980
U.S. citizens and permanent residents	8,285	8,944	9,800	9,645	9,985	9,861	10,407	10,347
American Indian/Alaska Native	57	61	44	52	55	55	71	70
Asian/Pacific Islander	394	466	482	526	567	561	555	577
Black, non-Hispanic	581	651	755	746	726	714	944	952
Hispanic	585	634	741	801	880	877	894	882
White, non-Hispanic	5,971	6,086	6,482	6,415	6,604	6,509	6,741	6,816
Other or unknown	697	1,046	1,296	1,105	1,153	1,145	1,202	1,050
Temporary visa holders	573	534	558	579	639	615	675	633
Social sciences	18,637	18,386	19,260	20,306	20,370	19,929	21,264	23,402
U.S. citizens and permanent residents	14,285	14,285	15,098	15,638	15,737	15,397	16,187	18,060
American Indian/Alaska Native	100	117	145	115	151	146	147	165
Asian/Pacific Islander	912	901	1,065	1,019	1,002	978	1,042	1,162
Black, non-Hispanic	1,317	1,386	1,378	1,460	1,459	1,419	1,653	1,745
Hispanic	912	961	1,132	1,133	1,178	1,165	1,216	1,465
White, non-Hispanic	9,479	9,408	9,846	10,095	9,987	9,775	10,279	11,320
Other or unknown	1,565	1,512	1,532	1,816	1,960	1,914	1,850	2,203
Temporary visa holders	4,352	4,101	4,162	4,668	4,633	4,532	5,077	5,342
Engineering	24,429	22,025	22,373	25,876	27,818	28,265	30,592	32,503
U.S. citizens and permanent residents	12,263	11,188	10,905	11,747	12,004	12,267	13,345	15,588
American Indian/Alaska Native	51	43	39	59	46	49	62	70
Asian/Pacific Islander	1,937	1,600	1,541	1,695	1,726	1,755	1,824	2,014
Black, non-Hispanic	504	516	524	612	580	598	618	686
Hispanic	679	649	649	713	683	696	827	998
White, non-Hispanic	8,068	7,609	7,230	7,548	7,822	8,000	8,661	10,121
Other or unknown	1,024	771	922	1,120	1,147	1,169	1,353	1,699
Temporary visa holders	12,166	10,837	11,468	14,129	15,814	15,998	17,247	16,915
Aerospace engineering	845	834	804	943	962	962	1,116	1,176
U.S. citizens and permanent residents	536	537	508	616	592	592	707	753
American Indian/Alaska Native	7	1	3	3	4	4	6	2
Asian/Pacific Islander	50	46	61	72	67	67	79	81
Black, non-Hispanic	9	18	12	17	14	14	29	15
Hispanic	25	27	28	21	22	22	31	38
White, non-Hispanic	394	408	354	453	442	442	456	500
Other or unknown	51	37	50	50	43	43	106	117
Temporary visa holders	309	297	296	327	370	370	409	423
Agricultural engineering	197	177	190	222	224	224	256	296
U.S. citizens and permanent residents	118	96	94	104	110	110	115	149
American Indian/Alaska Native	0	0	0	1	0	0	0	0
Asian/Pacific Islander	13	14	11	6	7	7	7	6
Black, non-Hispanic	5	2	1	4	0	0	3	8
Hispanic	2	0	5	5	3	3	5	8
White, non-Hispanic	92	78	75	82	90	90	96	119
Other or unknown	6	2	2	6	10	10	4	8
Temporary visa holders	79	81	96	118	114	114	141	147

TABLE 45. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Architecture ^a	na	na	na	na	na	1,533	1,979	2,273
U.S. citizens and permanent residents	na	na	na	na	na	1,214	1,578	1,839
American Indian/Alaska Native	na	na	na	na	na	5	10	15
Asian/Pacific Islander	na	na	na	na	na	78	112	95
Black, non-Hispanic	na	na	na	na	na	59	65	68
Hispanic	na	na	na	na	na	61	132	168
White, non-Hispanic	na	na	na	na	na	918	1,135	1,301
Other or unknown	na	na	na	na	na	93	124	192
Temporary visa holders	na	na	na	na	na	319	401	434
Biomedical engineering	1,327	1,274	1,267	1,472	1,559	1,565	1,648	1,833
U.S. citizens and permanent residents	879	841	821	951	951	957	1,012	1,220
American Indian/Alaska Native	1	5	2	6	1	1	2	3
Asian/Pacific Islander	154	195	175	223	220	221	226	290
Black, non-Hispanic	35	50	38	42	39	39	43	43
Hispanic	37	37	38	59	50	50	47	80
White, non-Hispanic	538	488	501	549	551	556	617	697
Other or unknown	114	66	67	72	90	90	77	107
Temporary visa holders	448	433	446	521	608	608	636	613
Chemical engineering	1,600	1,392	1,293	1,429	1,532	1,566	1,713	1,910
U.S. citizens and permanent residents	852	733	624	684	679	695	711	927
American Indian/Alaska Native	2	3	3	4	3	3	5	5
Asian/Pacific Islander	127	79	82	105	103	102	101	141
Black, non-Hispanic	37	30	28	21	35	37	36	42
Hispanic	71	44	44	56	41	41	36	52
White, non-Hispanic	576	556	432	457	457	470	479	614
Other or unknown	39	21	35	41	40	42	54	73
Temporary visa holders	748	659	669	745	853	871	1,002	983
Civil engineering ^a	4,363	4,175	4,057	4,198	4,926	3,662	4,073	4,878
U.S. citizens and permanent residents	2,595	2,591	2,492	2,650	3,188	2,188	2,335	3,017
American Indian/Alaska Native	7	11	9	17	17	14	10	13
Asian/Pacific Islander	218	225	203	235	271	205	232	335
Black, non-Hispanic	47	84	74	117	126	86	88	116
Hispanic	175	148	157	184	211	160	179	221
White, non-Hispanic	1,970	1,962	1,863	1,861	2,291	1,532	1,647	2,024
Other or unknown	178	161	186	236	272	191	179	308
Temporary visa holders	1,768	1,584	1,565	1,548	1,738	1,474	1,738	1,861
Electrical engineering	7,834	6,633	6,987	8,668	8,887	8,920	9,042	8,831
U.S. citizens and permanent residents	3,127	2,458	2,430	2,305	2,125	2,129	2,223	2,295
American Indian/Alaska Native	13	6	6	7	8	8	9	6
Asian/Pacific Islander	864	582	582	534	427	427	469	473
Black, non-Hispanic	136	121	124	151	120	120	93	133
Hispanic	157	162	157	139	109	110	140	119
White, non-Hispanic	1,617	1,383	1,318	1,201	1,208	1,210	1,180	1,278
Other or unknown	340	204	243	273	253	254	332	286
Temporary visa holders	4,707	4,175	4,557	6,363	6,762	6,791	6,819	6,536
Engineering science	392	361	317	321	331	339	398	309
U.S. citizens and permanent residents	231	225	177	173	173	179	176	143
American Indian/Alaska Native	5	1	2	0	0	0	1	1
Asian/Pacific Islander	31	38	27	31	30	30	22	17
Black, non-Hispanic	4	3	7	5	3	3	1	3
Hispanic	9	5	7	8	6	6	12	7
White, non-Hispanic	178	166	122	122	128	134	116	86
Other or unknown	4	12	12	7	6	6	24	29
Temporary visa holders	161	136	140	148	158	160	222	166

TABLE 45. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Industrial engineering	2,029	1,724	1,674	2,148	2,445	2,626	3,015	2,908
U.S. citizens and permanent residents	832	755	690	933	813	901	1,030	1,121
American Indian/Alaska Native	4	5	5	7	1	3	3	5
Asian/Pacific Islander	124	82	93	113	139	165	128	126
Black, non-Hispanic	76	73	70	94	87	89	109	110
Hispanic	43	73	51	74	55	60	66	78
White, non-Hispanic	512	452	404	521	424	460	569	604
Other or unknown	73	70	67	124	107	124	155	198
Temporary visa holders	1,197	969	984	1,215	1,632	1,725	1,985	1,787
Mechanical engineering	3,476	3,129	3,225	3,734	3,941	3,937	4,297	4,814
U.S. citizens and permanent residents	1,843	1,684	1,668	1,889	1,858	1,854	1,959	2,477
American Indian/Alaska Native	8	8	4	10	10	10	4	16
Asian/Pacific Islander	204	165	166	201	267	267	266	262
Black, non-Hispanic	70	58	69	64	70	69	71	67
Hispanic	108	96	102	104	110	110	102	133
White, non-Hispanic	1,322	1,242	1,222	1,357	1,263	1,260	1,335	1,770
Other or unknown	131	115	105	153	138	138	181	229
Temporary visa holders	1,633	1,445	1,557	1,845	2,083	2,083	2,338	2,337
Metallurgical/materials engineering	958	926	992	1,043	1,089	1,086	1,170	1,302
U.S. citizens and permanent residents	479	454	482	545	511	514	534	592
American Indian/Alaska Native	2	0	1	1	1	1	5	1
Asian/Pacific Islander	73	55	59	83	71	74	65	70
Black, non-Hispanic	22	8	15	34	28	27	17	12
Hispanic	20	18	14	17	22	22	29	38
White, non-Hispanic	338	349	359	375	355	353	372	427
Other or unknown	24	24	34	35	34	37	46	44
Temporary visa holders	479	472	510	498	578	572	636	710
Mining engineering	73	64	58	50	58	33	48	45
U.S. citizens and permanent residents	38	37	35	25	38	20	26	25
American Indian/Alaska Native	0	0	0	0	0	0	1	0
Asian/Pacific Islander	2	2	2	0	0	0	1	1
Black, non-Hispanic	0	1	1	0	3	0	1	1
Hispanic	0	2	2	1	2	0	1	0
White, non-Hispanic	35	29	27	22	33	20	21	23
Other or unknown	1	3	3	2	0	0	1	0
Temporary visa holders	35	27	23	25	20	13	22	20
Nuclear engineering	177	192	193	206	239	237	259	265
U.S. citizens and permanent residents	114	138	143	160	181	180	197	198
American Indian/Alaska Native	0	1	1	1	0	0	1	1
Asian/Pacific Islander	7	9	7	7	12	12	15	9
Black, non-Hispanic	3	4	4	1	4	4	7	3
Hispanic	5	4	8	8	10	10	8	11
White, non-Hispanic	95	110	116	130	140	139	150	155
Other or unknown	4	10	7	13	15	15	16	19
Temporary visa holders	63	54	50	46	58	57	62	67
Petroleum engineering	166	151	161	174	220	220	261	306
U.S. citizens and permanent residents	25	46	26	20	38	38	25	47
American Indian/Alaska Native	0	0	0	0	0	0	0	0
Asian/Pacific Islander	2	10	2	3	3	3	1	7
Black, non-Hispanic	2	6	9	2	9	9	3	2
Hispanic	2	2	1	3	0	0	3	3
White, non-Hispanic	17	27	13	9	23	23	17	34
Other or unknown	2	1	1	3	3	3	1	1
Temporary visa holders	141	105	135	154	182	182	236	259

TABLE 45. First-time, full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Field, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Engineering, nec	992	993	1,155	1,268	1,405	1,355	1,317	1,357
U.S. citizens and permanent residents	594	593	715	692	747	696	717	785
American Indian/Alaska Native	2	2	3	2	1	0	5	2
Asian/Pacific Islander	68	98	71	82	109	97	100	101
Black, non-Hispanic	58	58	72	60	42	42	52	63
Hispanic	25	31	35	34	42	41	36	42
White, non-Hispanic	384	359	424	409	417	393	471	489
Other or unknown	57	45	110	105	136	123	53	88
Temporary visa holders	398	400	440	576	658	659	600	572
Health ^a	18,384	19,979	21,181	22,069	22,031	21,459	21,816	19,001
U.S. citizens and permanent residents	16,829	18,316	19,374	20,164	20,118	19,648	19,719	16,954
American Indian/Alaska Native	85	88	91	89	120	118	132	95
Asian/Pacific Islander	1,319	1,523	1,653	1,692	1,580	1,522	1,566	1,390
Black, non-Hispanic	1,313	1,588	1,518	1,552	1,532	1,528	1,692	1,431
Hispanic	1,149	1,132	1,235	1,340	1,376	1,355	1,225	1,165
White, non-Hispanic	11,941	12,716	13,394	14,032	13,970	13,749	13,591	11,607
Other or unknown	1,022	1,269	1,483	1,459	1,540	1,376	1,513	1,266
Temporary visa holders	1,555	1,663	1,807	1,905	1,913	1,811	2,097	2,047

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 46. Graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						Temporary visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
All surveyed fields	631,645	3,042	38,660	37,349	32,336	302,677	45,584	171,997
Science and engineering	545,685	2,549	32,879	29,973	27,265	250,443	39,233	163,343
Science	401,008	2,205	22,952	25,801	22,047	200,047	30,648	97,308
Agricultural sciences	15,200	134	399	406	749	9,421	829	3,262
Biological sciences	73,304	330	6,164	3,575	3,719	37,464	4,703	17,349
Anatomy	833	3	83	27	50	456	44	170
Biochemistry	5,271	24	447	169	256	2,317	280	1,778
Biology	16,840	88	1,097	854	910	9,159	1,187	3,545
Biometry/epidemiology	5,739	28	705	462	265	2,381	425	1,473
Biophysics	1,042	5	108	31	40	497	44	317
Botany	1,831	11	96	22	50	876	70	706
Cell biology	7,153	44	747	256	379	3,333	429	1,965
Ecology	1,746	7	49	19	67	1,248	142	214
Entomology/parasitology	1,079	5	29	14	39	682	40	270
Genetics	2,242	4	167	83	75	1,194	114	605
Microbiology/immunology/virology	4,968	26	428	260	300	2,742	203	1,009
Nutrition	5,330	17	387	258	271	3,127	265	1,005
Pathology	1,450	5	133	109	62	731	102	308
Pharmacology	3,163	11	318	198	155	1,494	146	841
Physiology	2,866	7	301	137	124	1,536	192	569
Zoology	875	3	36	7	31	612	42	144
Biological sciences, nec	10,876	42	1,033	669	645	5,079	978	2,430
Communication	9,418	52	348	688	443	5,506	769	1,612
Computer sciences	51,161	128	3,916	2,088	1,371	15,533	3,289	24,836
Earth, atmospheric, and ocean sciences	14,839	75	415	311	585	9,651	1,045	2,757
Atmospheric sciences	1,355	7	41	39	46	851	72	299
Geosciences	7,539	43	185	113	270	4,893	532	1,503
Oceanography	2,633	12	46	41	141	1,743	187	463
Earth/atmospheric/ocean sciences, nec	3,312	13	143	118	128	2,164	254	492
Family and consumer sciences/ human sciences	3,794	23	137	538	158	2,390	206	342
Mathematical sciences	22,226	47	1,457	730	788	9,527	1,362	8,315
Mathematics/applied mathematics	17,204	42	1,064	608	668	8,034	1,128	5,660
Statistics	5,022	5	393	122	120	1,493	234	2,655
Multidisciplinary/interdisciplinary studies	6,557	54	302	480	401	3,422	869	1,029
Neuroscience	2,356	12	222	88	118	1,326	183	407
Physical sciences	38,149	119	1,871	979	1,282	16,933	1,887	15,078
Astronomy	1,409	7	66	6	37	764	89	440
Chemistry	22,094	74	1,180	746	834	9,650	1,031	8,579
Physics	14,060	31	565	206	397	6,134	745	5,982
Physical sciences, nec	586	7	60	21	14	385	22	77
Psychology	56,184	384	2,659	5,393	5,003	34,342	5,465	2,938
Clinical psychology	13,113	93	688	921	1,545	8,081	1,374	411
Psychology, general	15,148	119	776	1,386	1,052	9,463	1,312	1,040
Psychology, nec	27,923	172	1,195	3,086	2,406	16,798	2,779	1,487
Social sciences	107,820	847	5,062	10,525	7,430	54,532	10,041	19,383
Agricultural economics	2,222	11	64	64	48	932	78	1,025
Anthropology (cultural/social)	8,359	134	337	268	535	5,361	775	949
Economics (except agricultural)	13,993	27	695	436	453	4,531	855	6,996

TABLE 46. Graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
Geography	4,810	25	145	106	155	3,192	390	797
History and philosophy of science	1,006	5	21	51	72	704	60	93
Linguistics	3,170	40	210	59	148	1,504	268	941
Political science	43,919	288	2,190	5,243	3,362	22,424	4,821	5,591
Sociology	9,731	75	461	1,190	815	5,332	665	1,193
Sociology/anthropology	576	5	8	76	42	319	85	41
Social sciences, nec	20,034	237	931	3,032	1,800	10,233	2,044	1,757
Engineering	144,677	344	9,927	4,172	5,218	50,396	8,585	66,035
Aerospace engineering	5,266	16	377	108	195	2,485	424	1,661
Agricultural engineering	1,303	1	24	30	27	513	35	673
Architecture	6,804	32	325	300	454	3,968	532	1,193
Biomedical engineering	7,904	20	1,116	245	301	3,142	413	2,667
Chemical engineering	8,188	14	536	172	225	2,809	266	4,166
Civil engineering	18,638	59	1,136	528	915	7,884	1,228	6,888
Electrical engineering	41,218	54	3,041	900	1,072	8,908	1,961	25,282
Engineering science	2,168	6	134	51	69	821	148	939
Industrial engineering	15,825	61	977	826	717	5,305	1,625	6,314
Mechanical engineering	21,243	43	1,225	431	749	8,334	1,111	9,350
Metallurgical/materials engineering	5,863	11	362	112	145	2,119	200	2,914
Mining engineering	312	1	10	8	10	156	12	115
Nuclear engineering	1,243	4	58	22	42	763	69	285
Petroleum engineering	1,190	1	25	23	20	176	7	938
Engineering, nec	7,512	21	581	416	277	3,013	554	2,650
Health	85,960	493	5,781	7,376	5,071	52,234	6,351	8,654
Clinical medicine	24,125	156	2,231	3,234	1,701	11,867	1,882	3,054
Anesthesiology	402	3	23	10	9	303	51	3
Cardiology	50	0	5	3	0	29	0	13
Endocrinology	50	0	4	4	1	27	5	9
Gastroenterology	15	0	2	2	0	10	0	1
Hematology	11	0	0	0	0	4	3	4
Neurology	1,323	3	127	48	67	749	77	252
Obstetrics/gynecology	89	0	8	8	9	51	3	10
Oncology/cancer research	272	1	21	13	9	157	22	49
Ophthalmology	1	0	1	0	0	0	0	0
Otorhinolaryngology	4	0	1	0	0	2	0	1
Pediatrics	186	1	13	5	12	96	26	33
Preventive medicine/community health	18,797	130	1,747	2,849	1,376	8,805	1,524	2,366
Psychiatry	233	1	8	44	83	85	1	11
Pulmonary disease	13	1	1	1	2	7	0	1
Radiology	385	2	35	7	14	191	40	96
Surgery	40	0	4	4	0	26	4	2
Clinical medicine, nec	2,254	14	231	236	119	1,325	126	203
Other health	61,835	337	3,550	4,142	3,370	40,367	4,469	5,600
Dental sciences	1,770	6	238	46	86	820	93	481
Nursing	21,355	157	1,286	1,982	1,011	14,591	1,850	478
Pharmaceutical sciences	4,443	12	366	226	152	1,372	180	2,135
Speech pathology/audiology	14,641	66	494	600	880	11,086	1,055	460
Veterinary sciences	2,170	5	63	59	62	1,263	98	620
Other health, nec	17,456	91	1,103	1,229	1,179	11,235	1,193	1,426

nec = not elsewhere classified.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 47. Male graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						Temporary visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	White, non- Hispanic	Other or unknown		
All surveyed fields	328,525	1,293	19,390	12,810	14,196	147,124	22,448	111,264
Science and engineering	307,936	1,179	17,797	11,454	13,030	136,156	21,026	107,294
Science	196,577	913	10,553	8,597	9,163	96,365	14,303	56,683
Agricultural sciences	7,715	57	176	162	376	4,819	383	1,742
Biological sciences	31,486	136	2,556	1,119	1,465	16,378	2,018	7,814
Anatomy	405	2	38	6	23	229	21	86
Biochemistry	2,656	13	205	75	103	1,263	148	849
Biology	7,346	37	438	257	367	4,219	517	1,511
Biometry/epidemiology	2,344	11	314	162	91	945	155	666
Biophysics	665	1	62	16	32	334	34	186
Botany	860	5	34	10	18	426	35	332
Cell biology	3,203	18	320	86	161	1,563	189	866
Ecology	786	2	18	10	28	546	65	117
Entomology/parasitology	567	3	11	10	17	348	22	156
Genetics	891	4	62	26	34	456	39	270
Microbiology/immunology/virology	2,057	8	159	82	106	1,193	85	424
Nutrition	1,030	3	73	50	47	506	35	316
Pathology	540	0	52	21	22	272	24	149
Pharmacology	1,391	8	139	72	69	691	59	353
Physiology	1,441	5	148	43	57	797	113	278
Zoology	399	1	19	2	19	274	17	67
Biological sciences, nec	4,905	15	464	191	271	2,316	460	1,188
Communication	3,389	16	111	229	148	2,016	295	574
Computer sciences	38,108	100	2,730	1,289	1,078	12,341	2,487	18,083
Earth, atmospheric, and ocean sciences	8,024	46	187	153	277	5,160	542	1,659
Atmospheric sciences	908	6	25	25	26	598	48	180
Geosciences	4,344	27	89	65	134	2,785	286	958
Oceanography	1,202	6	20	14	72	752	81	257
Earth/atmospheric/ocean sciences, nec	1,570	7	53	49	45	1,025	127	264
Family and consumer sciences/ human sciences	591	5	17	77	29	366	33	64
Mathematical sciences	14,247	31	812	409	523	6,378	898	5,196
Mathematics/applied mathematics	11,417	27	609	333	446	5,426	755	3,821
Statistics	2,830	4	203	76	77	952	143	1,375
Multidisciplinary/interdisciplinary studies	2,748	16	123	154	148	1,468	336	503
Neuroscience	1,092	9	109	36	54	612	91	181
Physical sciences	25,458	71	1,080	486	787	11,681	1,295	10,058
Astronomy	978	4	40	4	27	513	65	325
Chemistry	12,872	39	577	311	424	5,878	606	5,037
Physics	11,214	23	421	156	326	5,036	609	4,643
Physical sciences, nec	394	5	42	15	10	254	15	53
Psychology	13,648	97	593	953	1,151	8,696	1,347	811
Clinical psychology	2,908	18	147	172	323	1,838	308	102
Psychology, general	4,281	35	195	266	283	2,801	378	323
Psychology, nec	6,459	44	251	515	545	4,057	661	386
Social sciences	50,071	329	2,059	3,530	3,127	26,450	4,578	9,998
Agricultural economics	1,273	3	27	42	21	571	45	564
Anthropology (cultural/social)	3,022	58	101	68	196	1,909	289	401
Economics (except agricultural)	8,873	17	403	276	311	3,167	597	4,102

TABLE 47. Male graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
Geography	2,739	12	66	63	91	1,863	217	427
History and philosophy of science	597	1	9	20	41	449	30	47
Linguistics	1,230	14	60	13	59	653	116	315
Political science	20,540	120	900	1,700	1,403	11,342	2,212	2,863
Sociology	3,572	31	150	351	318	1,990	233	499
Sociology/anthropology	205	1	5	19	15	112	41	12
Social sciences, nec	8,020	72	338	978	672	4,394	798	768
Engineering	111,359	266	7,244	2,857	3,867	39,791	6,723	50,611
Aerospace engineering	4,532	11	319	88	170	2,153	367	1,424
Agricultural engineering	866	0	13	18	18	361	22	434
Architecture	3,807	19	148	177	263	2,343	293	564
Biomedical engineering	4,925	13	688	106	191	2,001	255	1,671
Chemical engineering	5,572	12	320	106	139	2,049	190	2,756
Civil engineering	13,337	41	746	323	613	5,729	875	5,010
Electrical engineering	34,044	48	2,485	728	919	8,058	1,684	20,122
Engineering science	1,690	5	107	39	53	673	115	698
Industrial engineering	12,025	47	718	543	496	4,218	1,307	4,696
Mechanical engineering	18,253	38	981	337	628	7,248	952	8,069
Metallurgical/materials engineering	4,274	8	226	64	103	1,619	146	2,108
Mining engineering	257	1	8	5	8	133	11	91
Nuclear engineering	1,045	4	44	12	37	655	58	235
Petroleum engineering	981	1	22	17	15	146	6	774
Engineering, nec	5,751	18	419	294	214	2,405	442	1,959
Health	20,589	114	1,593	1,356	1,166	10,968	1,422	3,970
Clinical medicine	7,680	43	697	692	466	3,783	577	1,422
Anesthesiology	153	3	8	1	5	117	17	2
Cardiology	30	0	2	1	0	19	0	8
Endocrinology	17	0	3	1	0	8	1	4
Gastroenterology	7	0	1	1	0	4	0	1
Hematology	5	0	0	0	0	1	0	4
Neurology	647	2	59	23	32	368	38	125
Obstetrics/gynecology	20	0	3	3	2	8	0	4
Oncology/cancer research	116	0	11	3	3	71	7	21
Ophthalmology	1	0	1	0	0	0	0	0
Otorhinolaryngology	2	0	1	0	0	1	0	0
Pediatrics	45	0	2	1	4	21	1	16
Preventive medicine/community health	5,345	33	476	564	350	2,461	417	1,044
Psychiatry	51	0	2	9	16	17	0	7
Pulmonary disease	4	0	0	1	1	2	0	0
Radiology	270	1	20	5	11	139	24	70
Surgery	22	0	2	2	0	14	2	2
Clinical medicine, nec	945	4	106	77	42	532	70	114
Other health	12,909	71	896	664	700	7,185	845	2,548
Dental sciences	1,019	5	124	22	44	521	50	253
Nursing	1,893	20	163	132	129	1,191	182	76
Pharmaceutical sciences	2,145	3	146	80	57	654	88	1,117
Speech pathology/audiology	1,051	5	55	37	101	712	76	65
Veterinary sciences	808	1	19	13	26	389	32	328
Other health, nec	5,993	37	389	380	343	3,718	417	709

nec = not elsewhere classified.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 48. Female graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						Temporary visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	White, non- Hispanic	Other or unknown		
All surveyed fields	303,120	1,749	19,270	24,539	18,140	155,553	23,136	60,733
Science and engineering	237,749	1,370	15,082	18,519	14,235	114,287	18,207	56,049
Science	204,431	1,292	12,399	17,204	12,884	103,682	16,345	40,625
Agricultural sciences	7,485	77	223	244	373	4,602	446	1,520
Biological sciences	41,818	194	3,608	2,456	2,254	21,086	2,685	9,535
Anatomy	428	1	45	21	27	227	23	84
Biochemistry	2,615	11	242	94	153	1,054	132	929
Biology	9,494	51	659	597	543	4,940	670	2,034
Biometry/epidemiology	3,395	17	391	300	174	1,436	270	807
Biophysics	377	4	46	15	8	163	10	131
Botany	971	6	62	12	32	450	35	374
Cell biology	3,950	26	427	170	218	1,770	240	1,099
Ecology	960	5	31	9	39	702	77	97
Entomology/parasitology	512	2	18	4	22	334	18	114
Genetics	1,351	0	105	57	41	738	75	335
Microbiology/immunology/virology	2,911	18	269	178	194	1,549	118	585
Nutrition	4,300	14	314	208	224	2,621	230	689
Pathology	910	5	81	88	40	459	78	159
Pharmacology	1,772	3	179	126	86	803	87	488
Physiology	1,425	2	153	94	67	739	79	291
Zoology	476	2	17	5	12	338	25	77
Biological sciences, nec	5,971	27	569	478	374	2,763	518	1,242
Communication	6,029	36	237	459	295	3,490	474	1,038
Computer sciences	13,053	28	1,186	799	293	3,192	802	6,753
Earth, atmospheric, and ocean sciences	6,815	29	228	158	308	4,491	503	1,098
Atmospheric sciences	447	1	16	14	20	253	24	119
Geosciences	3,195	16	96	48	136	2,108	246	545
Oceanography	1,431	6	26	27	69	991	106	206
Earth/atmospheric/ocean sciences, nec	1,742	6	90	69	83	1,139	127	228
Family and consumer sciences/ human sciences	3,203	18	120	461	129	2,024	173	278
Mathematical sciences	7,979	16	645	321	265	3,149	464	3,119
Mathematics/applied mathematics	5,787	15	455	275	222	2,608	373	1,839
Statistics	2,192	1	190	46	43	541	91	1,280
Multidisciplinary/interdisciplinary studies	3,809	38	179	326	253	1,954	533	526
Neuroscience	1,264	3	113	52	64	714	92	226
Physical sciences	12,691	48	791	493	495	5,252	592	5,020
Astronomy	431	3	26	2	10	251	24	115
Chemistry	9,222	35	603	435	410	3,772	425	3,542
Physics	2,846	8	144	50	71	1,098	136	1,339
Physical sciences, nec	192	2	18	6	4	131	7	24
Psychology	42,536	287	2,066	4,440	3,852	25,646	4,118	2,127
Clinical psychology	10,205	75	541	749	1,222	6,243	1,066	309
Psychology, general	10,867	84	581	1,120	769	6,662	934	717
Psychology, nec	21,464	128	944	2,571	1,861	12,741	2,118	1,101
Social sciences	57,749	518	3,003	6,995	4,303	28,082	5,463	9,385
Agricultural economics	949	8	37	22	27	361	33	461
Anthropology (cultural/social)	5,337	76	236	200	339	3,452	486	548
Economics (except agricultural)	5,120	10	292	160	142	1,364	258	2,894

TABLE 48. Female graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						Temporary visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	White, non- Hispanic	Other or unknown		
Geography	2,071	13	79	43	64	1,329	173	370
History and philosophy of science	409	4	12	31	31	255	30	46
Linguistics	1,940	26	150	46	89	851	152	626
Political science	23,379	168	1,290	3,543	1,959	11,082	2,609	2,728
Sociology	6,159	44	311	839	497	3,342	432	694
Sociology/anthropology	371	4	3	57	27	207	44	29
Social sciences, nec	12,014	165	593	2,054	1,128	5,839	1,246	989
Engineering	33,318	78	2,683	1,315	1,351	10,605	1,862	15,424
Aerospace engineering	734	5	58	20	25	332	57	237
Agricultural engineering	437	1	11	12	9	152	13	239
Architecture	2,997	13	177	123	191	1,625	239	629
Biomedical engineering	2,979	7	428	139	110	1,141	158	996
Chemical engineering	2,616	2	216	66	86	760	76	1,410
Civil engineering	5,301	18	390	205	302	2,155	353	1,878
Electrical engineering	7,174	6	556	172	153	850	277	5,160
Engineering science	478	1	27	12	16	148	33	241
Industrial engineering	3,800	14	259	283	221	1,087	318	1,618
Mechanical engineering	2,990	5	244	94	121	1,086	159	1,281
Metallurgical/materials engineering	1,589	3	136	48	42	500	54	806
Mining engineering	55	0	2	3	2	23	1	24
Nuclear engineering	198	0	14	10	5	108	11	50
Petroleum engineering	209	0	3	6	5	30	1	164
Engineering, nec	1,761	3	162	122	63	608	112	691
Health	65,371	379	4,188	6,020	3,905	41,266	4,929	4,684
Clinical medicine	16,445	113	1,534	2,542	1,235	8,084	1,305	1,632
Anesthesiology	249	0	15	9	4	186	34	1
Cardiology	20	0	3	2	0	10	0	5
Endocrinology	33	0	1	3	1	19	4	5
Gastroenterology	8	0	1	1	0	6	0	0
Hematology	6	0	0	0	0	3	3	0
Neurology	676	1	68	25	35	381	39	127
Obstetrics/gynecology	69	0	5	5	7	43	3	6
Oncology/cancer research	156	1	10	10	6	86	15	28
Ophthalmology	0	0	0	0	0	0	0	0
Otorhinolaryngology	2	0	0	0	0	1	0	1
Pediatrics	141	1	11	4	8	75	25	17
Preventive medicine/community health	13,452	97	1,271	2,285	1,026	6,344	1,107	1,322
Psychiatry	182	1	6	35	67	68	1	4
Pulmonary disease	9	1	1	0	1	5	0	1
Radiology	115	1	15	2	3	52	16	26
Surgery	18	0	2	2	0	12	2	0
Clinical medicine, nec	1,309	10	125	159	77	793	56	89
Other health	48,926	266	2,654	3,478	2,670	33,182	3,624	3,052
Dental sciences	751	1	114	24	42	299	43	228
Nursing	19,462	137	1,123	1,850	882	13,400	1,668	402
Pharmaceutical sciences	2,298	9	220	146	95	718	92	1,018
Speech pathology/audiology	13,590	61	439	563	779	10,374	979	395
Veterinary sciences	1,362	4	44	46	36	874	66	292
Other health, nec	11,463	54	714	849	836	7,517	776	717

nec = not elsewhere classified.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 49. Graduate students in science fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
All institutions ^a	401,008	2,205	22,952	25,801	22,047	200,047	30,648	97,308
New England	29,503	115	1,695	1,012	946	13,606	3,458	8,671
Connecticut	6,642	19	278	324	227	3,478	582	1,734
Central CT State U.	432	0	18	34	18	292	45	25
CT C.	4	0	0	1	0	3	0	0
Quinnipiac U.	115	1	6	5	4	64	12	23
Rensselaer Hartford	71	0	7	3	8	43	10	0
Sacred Heart U.	149	2	8	3	2	66	2	66
Southern CT State U.	468	0	8	44	16	327	69	4
St. Joseph C. (West Hartford, CT)	218	2	4	21	13	157	21	0
Trinity C. (Hartford, CT)	60	0	3	4	6	46	1	0
U. Bridgeport	474	1	6	17	8	196	11	235
U. CT all campuses	1,915	5	74	69	55	969	94	649
U. Hartford	151	0	3	12	6	88	26	16
U. New Haven	618	3	14	58	35	350	69	89
Wesleyan U.	118	0	1	2	1	58	8	48
Western CT State U.	47	0	2	1	1	40	3	0
Yale U.	1,802	5	124	50	54	779	211	579
Maine	581	10	7	3	3	398	87	73
U. ME	581	10	7	3	3	398	87	73
Massachusetts	18,813	72	1,280	599	617	7,780	2,552	5,913
American International C.	154	0	7	36	13	80	17	1
Assumption C.	89	0	0	3	6	74	6	0
Boston C.	682	1	30	21	19	388	24	199
Boston U.	3,618	7	234	117	101	1,123	1,190	846
Brandeis U.	1,051	0	34	30	26	302	222	437
Bridgewater State C.	153	1	2	6	2	116	11	15
Clark U.	363	0	6	11	6	149	42	149
Fitchburg State C.	83	0	1	2	0	25	3	52
Framingham State C.	103	1	3	0	2	77	20	0
Harvard U.	3,766	16	380	135	141	1,477	252	1,365
MA C. of Pharmacy and Health Sciences	14	0	2	0	0	5	0	7
MA Institute of Technology	3,075	13	341	76	140	1,069	302	1,134
Mt. Holyoke C.	4	0	0	1	0	3	0	0
Northeastern U.	952	4	25	22	14	324	150	413
Salem State C.	103	0	0	1	6	79	9	8
Smith C.	12	0	0	0	1	9	0	2
Tufts U.	860	3	51	26	34	556	37	153
U. MA Amherst	1,509	10	40	42	59	710	109	539
U. MA Boston	536	6	29	23	14	352	20	92
U. MA Dartmouth	265	0	2	9	3	148	10	93
U. MA Lowell	742	9	44	24	21	430	77	137
U. MA Worcester	333	1	36	6	4	153	34	99
Williams C.	30	0	0	0	0	0	0	30
Worcester Polytechnic Institute	290	0	12	6	4	111	16	141
Worcester State C.	26	0	1	2	1	20	1	1
New Hampshire	1,159	6	50	16	19	652	92	324
Dartmouth C.	461	2	13	11	9	209	35	182
Rivier C.	38	0	23	1	0	10	4	0
U. NH	660	4	14	4	10	433	53	142
Rhode Island	1,764	7	66	64	61	913	141	512
Brown U.	988	4	51	33	40	403	58	399

TABLE 49. Graduate students in science fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							Temporary visa holders
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
RI C.	82	0	2	1	1	50	28	0
U. RI	694	3	13	30	20	460	55	113
Vermont	544	1	14	6	19	385	4	115
Marlboro C.	15	0	1	0	0	14	0	0
U. VT	529	1	13	6	19	371	4	115
Middle Atlantic ^a	63,139	166	4,128	3,830	2,718	28,465	6,042	17,790
New Jersey	9,028	20	797	548	404	3,378	1,319	2,562
Fairleigh Dickinson U. all campuses	1,019	0	0	0	0	0	648	371
Kean U.	237	0	19	73	28	90	10	17
Monmouth U.	322	2	11	22	16	214	24	33
Montclair State U.	698	0	30	41	40	461	71	55
NJ Institute of Technology	838	7	127	61	48	175	47	373
Princeton U.	1,295	2	91	41	46	618	51	446
Rutgers, The State U. NJ all campuses	2,791	5	338	155	125	1,226	100	842
Seton Hall U.	726	2	34	92	36	264	251	47
Stevens Institute of Technology	386	0	38	7	15	87	48	191
U. of Medicine and Dentistry NJ	650	2	101	43	41	212	68	183
William Paterson U. NJ	66	0	8	13	9	31	1	4
New York ^a	38,029	111	2,517	2,501	1,929	16,135	3,754	11,082
Adelphi U.	360	0	17	33	21	218	47	24
Albany Medical C.	132	0	4	4	2	43	68	11
Alfred U. all campuses	87	0	1	3	2	67	14	0
Clarkson U.	103	1	0	0	0	43	3	56
C. New Rochelle	350	1	2	82	18	21	225	1
C. of St. Rose	85	0	8	4	4	58	8	3
Columbia U. in the City of NY	2,629	9	237	70	83	925	140	1,165
Cornell U. all campuses	3,083	13	177	86	98	1,300	246	1,163
CUNY Baruch C.	1,193	3	102	215	172	482	179	40
CUNY Brooklyn C.	859	0	81	225	63	353	0	137
CUNY C. Staten Island	120	0	6	7	3	50	35	19
CUNY Graduate Ctr.	1,772	4	75	87	100	613	362	531
CUNY Herbert H. Lehman C.	68	0	15	12	9	26	0	6
CUNY Hunter C.	571	1	61	57	66	315	20	51
CUNY John Jay C. of Criminal Justice	301	1	16	32	53	172	27	0
CUNY Queens C.	1,013	1	104	183	115	406	110	94
CUNY The City C.	591	3	70	88	58	167	17	188
Fordham U.	840	3	32	41	58	301	296	109
Hofstra U.	279	0	23	26	4	189	25	12
Iona C.	119	1	1	13	12	51	40	1
Marist C.	606	3	16	64	44	393	59	27
Mt. Sinai School of Medicine	178	2	12	2	10	49	20	83
New School, The	1,454	5	76	108	110	614	221	320
NY Institute of Technology all campuses	242	0	7	15	9	30	26	155
NY Medical C.	239	2	54	21	17	95	6	44
NY U.	3,131	4	282	112	133	1,097	369	1,134
Niagara U.	61	0	0	7	0	52	0	2
Pace U. all campuses	456	0	46	51	43	139	73	104
Polytechnic U.	681	0	48	16	13	73	72	459
Rensselaer Polytechnic Institute	442	1	29	9	9	183	38	173
Rochester Institute of Technology	921	1	31	28	11	425	41	384
Rockefeller U.	158	0	17	9	4	66	5	57
Russell Sage C. all campuses	49	0	1	3	2	33	9	1
Sarah Lawrence C.	16	0	1	2	0	12	1	0

TABLE 49. Graduate students in science fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							Temporary visa holders
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
St. John's U. (Jamaica, NY)	636	1	60	63	69	306	54	83
SUNY Albany	2,240	11	93	115	75	1,326	177	443
SUNY Binghamton	1,054	3	36	31	33	449	62	440
SUNY Buffalo all campuses	2,137	11	84	51	49	895	170	877
SUNY C. Brockport	172	1	4	12	5	141	9	0
SUNY C. Buffalo	10	0	2	1	0	6	1	0
SUNY C. of Environmental Science and Forestry	350	6	2	1	6	252	1	82
SUNY C. of Optometry	49	0	15	0	0	19	0	15
SUNY C. Oneonta	5	0	0	0	0	3	2	0
SUNY C. Oswego	127	0	1	3	2	119	0	2
SUNY C. Plattsburgh	34	0	2	1	3	28	0	0
SUNY C. Potsdam	3	0	0	0	0	3	0	0
SUNY Fredonia	33	0	0	0	0	29	1	3
SUNY Health Science Ctr. Brooklyn	68	0	13	7	2	19	0	27
SUNY Institute of Technology Utica-Rome	132	0	1	3	0	91	4	33
SUNY New Paltz	113	0	4	4	0	54	13	38
SUNY Stony Brook all campuses	1,863	1	112	49	55	619	59	968
SUNY Upstate Medical U.	106	0	7	2	3	52	2	40
Syracuse U. all campuses	1,772	10	63	85	40	761	120	693
Teachers C. Columbia U.	1,478	1	224	134	101	720	124	174
U. Rochester	1,055	5	32	10	30	549	7	422
Vassar C.	1	0	0	0	0	1	0	0
Wagner C.	12	0	1	0	3	7	1	0
Yeshiva U.	607	0	47	23	41	382	14	100
Pennsylvania ^a	16,082	35	814	781	385	8,952	969	4,146
Bloomsburg U. PA	10	0	0	0	0	9	0	1
Bryn Mawr C.	69	0	2	0	1	49	12	5
Bucknell U.	20	0	1	0	0	16	1	2
Carnegie Mellon U.	1,905	3	108	50	31	570	172	971
Clarion U. PA all campuses	31	0	1	1	0	28	0	1
Drexel U.	1,013	1	100	63	24	560	57	208
Duquesne U.	240	0	6	6	3	161	21	43
Edinboro U. PA	116	0	2	7	2	101	4	0
Gannon U.	46	0	0	4	1	35	2	4
Indiana U. PA all campuses	630	3	9	24	7	481	71	35
Kutztown U. PA	117	1	0	8	1	97	4	6
Lehigh U.	488	2	16	7	12	306	28	117
Marywood U.	161	2	0	2	3	128	22	4
Millersville U. PA	125	0	1	3	2	101	16	2
PA State U. all campuses	3,071	6	122	99	82	1,757	81	924
Philadelphia C. of Osteopathic Medicine	617	1	34	128	13	392	49	0
Shippensburg U. PA	298	0	9	23	8	217	25	16
Slippery Rock U. PA	109	0	0	0	0	87	12	10
St. Joseph's U.	532	1	12	82	26	305	41	65
Temple U.	1,184	2	48	105	23	564	150	292
Thomas Jefferson U.	212	0	22	8	6	131	17	28
U. PA	1,872	8	162	41	63	968	53	577
U. Pittsburgh all campuses	2,121	4	96	62	55	1,169	34	701
U. Scranton	125	0	1	3	2	94	5	20
U. of the Sciences Philadelphia	144	0	8	6	3	26	70	31
Villanova U.	433	1	29	14	8	295	20	66
West Chester U. PA	303	0	24	29	6	229	0	15
Wilkes U.	2	0	0	0	0	2	0	0
East North Central ^a	60,574	223	2,387	3,394	1,786	32,379	3,561	16,844

TABLE 49. Graduate students in science fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							Temporary visa holders
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Illinois	20,523	60	1,064	1,388	766	9,821	1,230	6,194
Bradley U.	61	0	0	0	0	6	3	52
Chicago State U.	171	1	5	127	8	26	3	1
DePaul U.	1,579	2	141	165	104	736	215	216
Eastern IL U.	338	1	5	31	4	269	7	21
Governors State U.	396	2	3	162	30	115	19	65
IL Institute of Technology	1,278	2	40	33	22	250	157	774
IL State U.	731	0	20	24	14	502	21	150
Loyola U. Chicago	580	1	36	29	20	374	32	88
Midwestern U. (Chicago, IL)	166	1	29	9	6	87	31	3
North Central C.	15	0	1	1	2	8	1	2
Northeastern IL U.	336	2	31	24	26	196	18	39
Northern IL U.	1,026	4	37	31	27	633	7	287
Northwestern U.	1,877	6	115	83	91	893	143	546
Roosevelt U.	619	0	37	129	48	287	55	63
Rosalind Franklin U. of Medicine and Science	30	0	7	1	2	8	1	11
Rush U.	105	0	16	5	3	60	7	14
Southern IL U. Carbondale	1,680	8	39	74	25	942	0	592
Southern IL U. Edwardsville	586	3	10	70	12	375	21	95
U. Chicago	2,109	9	95	68	62	969	244	662
U. IL Chicago	2,236	7	120	167	135	953	100	754
U. IL Springfield	714	1	31	59	9	432	44	138
U. IL Urbana-Champaign	3,480	9	237	81	110	1,515	81	1,447
Western IL U.	410	1	9	15	6	185	20	174
Indiana	7,605	40	203	256	182	3,814	701	2,409
Ball State U.	492	0	0	0	0	47	436	9
IN State U. all campuses	219	0	12	13	8	150	8	28
IN U. all campuses	3,586	24	121	134	84	2,060	45	1,118
Purdue U. all campuses	2,417	14	50	85	65	1,105	110	988
U. Evansville	2	0	0	0	0	0	2	0
U. of Notre Dame	700	1	16	16	18	366	65	218
U. of St. Francis (Ft. Wayne, IN)	25	0	0	0	0	23	2	0
Valparaiso U.	164	1	4	8	7	63	33	48
Michigan ^a	11,093	56	493	748	270	5,889	507	3,130
Andrews U.	106	0	1	18	14	53	0	20
Central MI U.	450	5	1	12	2	314	13	103
Eastern MI U.	969	9	26	137	19	553	52	173
Ferris State U.	58	0	0	5	0	20	0	33
Grand Valley State U.	160	1	10	2	1	101	4	41
Lawrence Technological U.	39	0	2	5	0	20	6	6
MI State U.	2,446	13	74	68	63	1,144	91	993
MI Technological U.	328	0	6	2	3	148	34	135
Northern MI U.	132	4	2	1	1	110	6	8
Oakland U.	364	3	28	20	6	206	24	77
U. MI all campuses	2,819	4	223	98	99	1,550	97	748
Wayne State U.	1,650	10	96	217	35	757	92	443
Western MI U.	1,248	7	20	110	22	782	53	254
Ohio	14,321	32	403	852	390	8,279	732	3,633
Air Force Institute of Technology	149	0	0	0	0	4	129	16
Antioch U. all campuses	1,609	7	42	73	127	1,181	148	31
Bowling Green State U. all campuses	755	4	12	39	13	404	45	238
Case Western Reserve U.	994	3	69	44	45	467	64	302
Cleveland State U.	612	2	17	57	11	295	48	182
John Carroll U.	55	0	1	3	0	47	3	1

TABLE 49. Graduate students in science fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
Kent State U. all campuses	897	2	16	19	8	566	5	281
Miami U. all campuses	642	2	25	21	6	414	21	153
OH State U. all campuses	3,158	3	94	89	70	1,617	105	1,180
OH U. all campuses	938	2	16	38	14	507	0	361
U. Akron all campuses	926	1	20	88	15	512	15	275
U. Cincinnati all campuses	1,691	3	33	207	52	1,061	70	265
U. Dayton	399	1	4	66	6	268	15	39
U. Toledo	573	1	20	26	7	296	33	190
Wright State U. all campuses	557	1	29	59	13	360	22	73
Xavier U.	151	0	3	7	3	135	0	3
Youngstown State U.	215	0	2	16	0	145	9	43
Wisconsin	7,032	35	224	150	178	4,576	391	1,478
Marquette U.	232	0	7	4	3	112	12	94
Medical C. WI	171	2	3	6	1	121	0	38
Milwaukee School of Engineering	14	0	0	1	0	12	0	1
U. WI Eau Claire	28	0	0	0	0	25	1	2
U. WI Green Bay	40	3	2	0	1	31	2	1
U. WI La Crosse	108	0	1	0	1	104	0	2
U. WI Madison	3,840	14	137	70	116	2,244	240	1,019
U. WI Milwaukee	2,130	12	63	63	52	1,565	103	272
U. WI Oshkosh	105	3	2	0	2	94	1	3
U. WI Platteville	10	0	0	0	0	5	0	5
U. WI Stevens Point	77	0	0	1	0	59	11	6
U. WI Stout	245	1	7	4	2	176	20	35
U. WI Whitewater	32	0	2	1	0	28	1	0
West North Central	33,963	283	1,013	3,406	879	17,585	3,086	7,711
Iowa	4,429	13	95	117	85	2,157	124	1,838
Drake U.	219	0	6	10	2	165	34	2
IA State U.	2,017	5	38	55	26	1,038	65	790
Loras C.	19	0	0	0	0	19	0	0
Maharishi U. of Management	568	0	0	2	0	0	0	566
U. IA	1,354	7	48	40	51	766	20	422
U. Northern IA	252	1	3	10	6	169	5	58
Kansas	4,378	49	113	135	106	2,555	308	1,112
Emporia State U.	158	1	6	3	2	113	7	26
Ft. Hays State U.	74	0	6	1	2	64	1	0
KS State U.	1,507	12	28	51	28	853	46	489
Pittsburg State U.	142	3	0	2	1	100	9	27
U. KS all campuses	1,810	29	46	42	48	1,042	194	409
Washburn U.	26	0	0	2	0	23	0	1
Wichita State U.	661	4	27	34	25	360	51	160
Minnesota	13,167	110	412	2,738	445	5,843	2,007	1,612
Bemidji State U.	32	0	0	0	0	31	0	1
Mayo Graduate School	181	3	13	6	14	69	33	43
MN State U. Mankato	390	0	0	0	0	0	390	0
MN State U. Moorhead	41	0	0	0	1	37	1	2
St. Cloud State U.	390	2	21	9	4	258	14	82
St. Mary's U. MN	70	0	0	3	0	50	12	5
U. MN all campuses	4,389	24	222	79	81	2,587	152	1,244
Walden U.	7,674	81	156	2,641	345	2,811	1,405	235
Missouri	6,333	33	193	275	132	3,563	410	1,727
A.T. Still U. of Health Sciences	25	0	2	3	1	17	1	1

TABLE 49. Graduate students in science fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

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Forest Institute of Professional Psychology	257	9	5	11	8	217	4	3
Kansas City U. of Medicine and Biosciences	66	0	7	1	1	56	1	0
Lincoln U. (Jefferson City, MO)	23	0	0	11	0	8	1	3
MO U. of Science & Technology	229	0	4	1	1	84	4	135
Northwest MO State U.	199	0	3	0	2	86	6	102
Southeast MO State U.	49	0	0	3	1	32	0	13
Southwest MO State U.	397	2	10	3	4	269	88	21
St. Louis U. all campuses	664	3	22	69	16	428	51	75
Truman State U.	3	0	0	0	0	3	0	0
U. of Central MO	418	1	7	20	10	248	60	72
U. MO-Columbia	1,507	7	28	49	20	827	76	500
U. MO-Kansas City	723	0	20	41	22	354	32	254
U. MO-St. Louis	511	5	16	32	6	291	41	120
Washington U. St. Louis	1,262	6	69	31	40	643	45	428
Nebraska	3,002	15	109	98	79	1,839	157	705
Creighton U.	263	1	19	15	7	179	8	34
U. NE Kearney	261	3	11	5	7	204	23	8
U. NE Lincoln	1,555	8	41	41	49	862	86	468
U. NE Omaha	818	3	14	35	13	548	40	165
U. NE Medical Ctr.	105	0	24	2	3	46	0	30
North Dakota	1,559	37	29	27	16	850	60	540
ND State U. all campuses	825	4	16	9	4	393	34	365
U. ND all campuses	734	33	13	18	12	457	26	175
South Dakota	1,095	26	62	16	16	778	20	177
SD School of Mines and Technology	74	3	1	1	0	49	9	11
SD State U.	456	11	50	11	10	240	10	124
U. SD	565	12	11	4	6	489	1	42
South Atlantic	69,954	211	3,419	6,536	3,316	36,568	4,643	15,261
Delaware	1,487	4	63	104	24	765	10	517
DE State U.	83	0	2	41	2	25	0	13
U. DE	1,404	4	61	63	22	740	10	504
District of Columbia	8,559	29	563	807	343	4,097	1,309	1,411
American U.	2,028	8	88	180	85	899	548	220
Catholic U. America, The	262	0	13	13	13	131	61	31
Gallaudet U.	92	1	0	11	6	62	7	5
George Washington U.	2,956	15	239	137	122	1,672	233	538
Georgetown U.	2,620	2	214	74	97	1,304	392	537
Howard U.	560	3	7	371	11	26	62	80
U. DC	41	0	2	21	9	3	6	0
Florida	16,611	54	673	1,680	1,834	8,609	586	3,175
Barry U.	222	0	50	34	51	61	26	0
Embry-Riddle Aeronautical U.	80	0	0	5	5	50	6	14
FL A&M U.	305	1	2	248	2	6	4	42
FL Atlantic U.	887	1	34	59	86	541	15	151
FL Institute of Technology	615	1	11	22	33	261	114	173
FL International U.	1,438	5	47	200	497	372	22	295
FL State U.	2,528	10	78	178	149	1,523	23	567
Nova Southeastern U.	2,551	11	116	481	419	1,318	153	53
U. Central FL	1,797	2	74	133	153	1,072	43	320
U. FL	3,196	16	116	91	188	1,644	127	1,014
U. Miami	795	2	32	32	102	318	41	268
U. South FL	1,778	4	92	172	129	1,113	7	261

TABLE 49. Graduate students in science fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

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U. West FL	419	1	21	25	20	330	5	17
Georgia	7,435	24	347	867	180	3,518	206	2,293
Augusta State U.	42	0	2	7	1	32	0	0
Clark Atlanta U.	243	0	1	219	0	4	1	18
Emory U.	887	2	42	66	22	448	46	261
GA C. and State U.	164	2	5	31	4	105	9	8
GA Institute of Technology all campuses	1,939	2	99	78	48	738	35	939
GA Southern U.	203	4	5	22	7	138	10	17
GA State U.	1,385	6	112	173	48	526	56	464
Medical C. GA	133	0	6	13	0	47	2	65
Morehouse School of Medicine	116	0	7	104	1	1	3	0
U. GA	1,888	6	59	75	38	1,179	21	510
U. West GA	181	0	3	26	4	118	19	11
Valdosta State U.	254	2	6	53	7	182	4	0
Maryland	9,823	27	651	1,070	299	4,892	627	2,257
Coppin State U.	82	0	0	79	0	1	1	1
Frostburg State U.	65	1	0	1	0	55	3	5
Hood C.	353	2	9	31	8	250	31	22
Johns Hopkins U., The	2,159	6	210	104	73	999	85	682
Loyola C.	579	1	16	101	10	394	29	28
Morgan State U.	98	0	6	64	1	7	0	20
Towson U.	749	6	43	113	24	374	53	136
Uniformed Services U. of the Health Sciences	116	0	10	3	5	75	10	13
U. Baltimore	494	1	16	173	5	150	90	59
U. MD Baltimore	298	4	33	30	17	172	3	39
U. MD Baltimore County	1,625	4	158	197	47	788	146	285
U. MD College Park	3,070	2	146	143	82	1,617	159	921
U. MD Eastern Shore	120	0	4	31	27	10	2	46
Washington C.	15	0	0	0	0	0	15	0
North Carolina	11,103	24	464	1,075	263	6,540	345	2,392
Appalachian State U.	350	0	4	7	1	246	83	9
Duke U.	1,479	2	70	50	48	816	36	457
East Carolina U.	692	3	25	51	11	522	34	46
NC Agricultural and Technical State U.	220	0	6	165	2	20	2	25
NC Central U.	489	1	10	398	6	41	15	18
NC State U.	2,953	4	106	124	83	1,688	12	936
U. NC Chapel Hill	2,340	7	185	122	57	1,525	58	386
U. NC Charlotte	1,027	2	24	73	21	540	28	339
U. NC Greensboro	539	1	12	45	15	360	27	79
U. NC Wilmington	478	2	5	20	10	383	43	15
Wake Forest U.	377	0	12	16	8	258	5	78
Western Carolina U.	159	2	5	4	1	141	2	4
South Carolina	2,182	7	44	114	42	1,276	99	600
Clemson U.	982	2	12	35	12	528	61	332
C. Charleston	239	0	2	6	5	213	7	6
Furman U.	4	0	0	0	0	3	0	1
Medical U. SC	159	0	6	14	6	110	5	18
U. SC all campuses	711	5	21	53	19	347	26	240
Winthrop U.	87	0	3	6	0	75	0	3
Virginia	11,102	37	589	775	304	5,720	1,420	2,257
C. of William and Mary all campuses	433	6	11	16	16	304	4	76
Eastern VA Medical School	83	0	10	9	4	53	0	7
George Mason U.	4,068	6	270	153	137	1,586	1,192	724

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Hampton U.	103	0	10	76	3	13	0	1
James Madison U.	262	1	7	8	3	199	18	26
Marymount U.	346	1	14	37	13	223	34	24
Old Dominion U.	912	4	22	85	18	485	57	241
Radford U.	83	0	2	6	0	74	0	1
U. VA all campuses	1,190	5	53	30	28	680	36	358
VA Commonwealth U.	1,208	2	79	129	26	780	29	163
VA Polytechnic Institute and State U.	2,314	12	105	138	56	1,318	49	636
VA State U.	100	0	6	88	0	5	1	0
West Virginia	1,652	5	25	44	27	1,151	41	359
Marshall U.	548	3	8	18	5	439	11	64
WV U.	1,104	2	17	26	22	712	30	295
East South Central	15,929	46	500	2,107	241	9,425	367	3,243
Alabama	4,595	18	256	830	57	2,419	108	907
AL A&M U.	151	1	9	42	0	3	1	95
AL State U.	29	0	3	20	0	6	0	0
Auburn U. all campuses	1,080	4	33	116	19	612	7	289
Jacksonville State U.	352	0	1	108	4	206	13	20
Troy U. main campus	493	6	3	313	2	151	18	0
Tuskegee U.	87	0	0	52	0	0	8	27
U. AL, The	709	0	28	38	11	437	4	191
U. AL Birmingham, The	903	4	157	83	19	523	37	80
U. AL Huntsville, The	395	2	14	30	1	237	4	107
U. South AL	396	1	8	28	1	244	16	98
Kentucky	3,620	6	55	206	49	2,366	118	820
Eastern KY U.	280	1	7	12	1	241	1	17
Morehead State U.	132	0	0	2	0	119	1	10
Murray State U.	411	0	2	48	8	285	8	60
U. KY all campuses	1,651	2	20	65	30	984	80	470
U. Louisville	699	1	25	55	7	439	22	150
Western KY U.	447	2	1	24	3	298	6	113
Mississippi	2,587	13	41	486	37	1,436	56	518
Jackson State U.	383	0	5	287	4	29	5	53
MS State U.	1,163	8	21	105	12	747	48	222
U. MS all campuses	330	2	9	33	4	180	1	101
U. Southern MS	711	3	6	61	17	480	2	142
Tennessee	5,127	9	148	585	98	3,204	85	998
Austin Peay State U.	130	0	3	19	8	91	7	2
East TN State U.	328	1	5	12	9	235	9	57
Fisk U.	41	0	1	30	1	3	1	5
Meharry Medical C.	57	0	0	55	1	0	0	1
Middle TN State U.	461	2	23	45	8	314	11	58
TN State U.	354	1	10	212	3	108	1	19
TN Technological U.	186	0	3	8	4	155	0	16
U. Memphis, The	590	0	20	76	4	350	7	133
U. TN Chattanooga	160	0	4	11	2	134	0	9
U. TN Health Science Ctr.	136	0	4	14	4	63	1	50
U. TN Knoxville	1,610	3	25	53	20	1,108	31	370
Vanderbilt U.	1,074	2	50	50	34	643	17	278
West South Central	37,902	341	1,898	3,045	3,177	17,907	796	10,738

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Arkansas	2,055	16	111	164	26	1,256	35	447
AR State U. main campus	318	3	0	49	1	170	5	90
U. AR for Medical Sciences	147	1	11	12	0	78	1	44
U. AR Little Rock	316	2	82	47	6	178	1	0
U. AR main campus	965	6	13	34	16	582	22	292
U. Central AR	309	4	5	22	3	248	6	21
Louisiana	4,622	13	155	838	78	2,045	175	1,318
Grambling State U.	127	0	0	116	1	5	0	5
LA State U. all campuses	2,351	7	51	220	52	1,161	118	742
LA Tech U.	135	0	2	10	0	36	1	86
Loyola U. New Orleans	39	0	1	9	3	24	2	0
McNeese State U.	146	0	3	9	2	72	16	44
Nicholls State U.	144	3	1	46	1	90	0	3
Northwestern State U.	30	0	0	9	1	19	1	0
Southeastern LA U.	146	0	2	18	0	108	1	17
Southern U. and A&M C. all campuses	457	0	52	358	0	12	0	35
Tulane U.	487	2	35	18	13	273	12	134
U. LA Lafayette	463	1	6	13	5	173	17	248
U. LA Monroe	97	0	2	12	0	72	7	4
Oklahoma	3,876	189	111	192	105	2,264	33	982
Cameron U.	144	8	2	33	7	84	6	4
East Central U.	50	9	0	1	0	39	1	0
Northeastern State U.	204	42	0	10	7	142	0	3
OK State U. all campuses	1,450	51	25	42	26	746	2	558
U. OK all campuses	1,814	71	80	103	60	1,119	1	380
U. Tulsa	214	8	4	3	5	134	23	37
Texas	27,349	123	1,521	1,851	2,968	12,342	553	7,991
Abilene Christian U.	279	0	3	22	15	128	93	18
Angelo State U.	102	0	1	2	14	84	1	0
Baylor C. of Medicine	481	3	40	20	39	185	0	194
Baylor U.	452	3	18	7	15	299	10	100
Lamar U.	175	0	2	5	7	48	52	61
Midwestern State U.	103	1	4	7	3	62	1	25
Prairie View A&M U.	257	2	3	181	8	25	3	35
Rice U.	719	2	30	13	44	270	15	345
Sam Houston State U.	315	0	11	9	18	221	3	53
Southern Methodist U.	314	2	8	5	20	147	1	131
St. Mary's U. (San Antonio, TX)	243	8	14	13	66	69	41	32
Stephen F. Austin State U.	444	4	6	62	18	312	3	39
Sul Ross State U.	160	0	1	5	61	90	0	3
Tarleton State U.	273	1	9	31	21	191	6	14
TX A&M U. all campuses	3,682	13	110	111	307	1,747	44	1,350
TX A&M U. Commerce	727	1	271	27	10	154	9	255
TX A&M U. Corpus Christi	332	2	10	5	63	167	0	85
TX A&M U. Kingsville	392	1	3	9	95	119	0	165
TX A&M U. System Health Science Ctr.	115	0	8	0	0	39	1	67
TX Christian U.	129	0	3	1	6	86	4	29
TX Southern U.	440	0	15	366	9	11	25	14
TX State U. San Marcos	1,377	6	71	67	231	916	21	65
TX Tech U.	1,287	4	22	16	57	601	10	577
TX Woman's U.	684	6	34	113	47	400	3	81
U. Houston	1,393	2	84	56	90	489	11	661
U. Houston-Clear Lake	1,040	4	57	125	113	366	1	374
U. Houston-Victoria	232	0	30	44	44	103	1	10

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U. North TX	1,611	16	59	117	121	916	16	366
U. TX Arlington	1,324	7	59	145	102	617	31	363
U. TX Austin	2,350	8	113	41	125	1,255	53	755
U. TX Dallas	1,508	3	124	73	63	520	7	718
U. TX El Paso	498	2	9	8	236	103	4	136
U. TX Health Science Ctr. Houston	810	0	102	26	79	286	5	312
U. TX Health Science Ctr. San Antonio	234	1	13	7	38	79	0	96
U. TX Medical Branch	216	0	15	9	16	96	14	66
U. TX of the Permian Basin	78	2	2	4	25	44	0	1
U. TX San Antonio	1,092	2	54	56	346	419	10	205
U. TX Southwestern Medical Ctr. Dallas	527	8	86	16	52	249	31	85
U. TX Tyler	226	4	3	14	8	167	1	29
U. TX-Pan American	349	1	11	3	257	30	8	39
U. of the Incarnate Word	118	0	2	6	58	32	14	6
Wayland Baptist U.	10	0	0	0	1	9	0	0
West TX A&M U.	251	4	1	4	20	191	0	31
Mountain	26,372	357	888	447	1,577	16,365	1,975	4,763
Arizona	6,076	135	278	143	451	3,306	270	1,493
AZ State U. main campus	2,769	32	119	81	208	1,446	114	769
Northern AZ U.	542	24	23	5	38	404	21	27
U. AZ	2,765	79	136	57	205	1,456	135	697
Colorado	8,471	84	292	148	426	5,642	925	954
CO School of Mines	592	5	19	9	27	356	47	129
CO State U.	1,851	28	46	18	76	1,270	182	231
U. CO all campuses	3,807	38	156	77	195	2,608	270	463
U. Denver	1,658	9	59	32	95	986	384	93
U. Northern CO	563	4	12	12	33	422	42	38
Idaho	1,366	12	41	8	32	988	63	222
Boise State U.	324	1	10	2	12	259	18	22
ID State U.	323	4	11	1	3	255	0	49
U. ID	719	7	20	5	17	474	45	151
Montana	1,365	27	23	5	18	1,125	65	102
MT State U. Bozeman	599	2	8	2	5	508	15	59
MT Tech of the U. MT	40	0	0	1	0	36	1	2
U. MT-Missoula, The	726	25	15	2	13	581	49	41
Nevada	1,752	10	95	74	95	1,059	148	271
U. NV, Las Vegas	894	6	52	58	59	529	80	110
U. NV, Reno	858	4	43	16	36	530	68	161
New Mexico	2,851	72	48	49	433	1,279	241	729
Eastern NM U. all campuses	146	2	1	4	25	93	3	18
NM Highlands U.	109	3	6	2	34	38	26	0
NM Institute of Mining and Technology	175	2	1	0	13	99	4	56
NM State U. all campuses	1,040	18	6	20	177	342	146	331
U. NM all campuses	1,381	47	34	23	184	707	62	324
Utah	3,720	12	100	19	110	2,483	178	818
Brigham Young U. all campuses	1,115	4	33	7	45	854	44	128
U. UT	1,679	3	55	9	49	993	74	496
UT State U.	926	5	12	3	16	636	60	194
Wyoming	771	5	11	1	12	483	85	174
U. WY	771	5	11	1	12	483	85	174

TABLE 49. Graduate students in science fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
Pacific	60,914	463	6,956	2,022	5,022	27,729	6,717	12,005
Alaska	936	67	22	8	16	654	82	87
U. AK Anchorage all campuses	141	3	1	3	3	114	10	7
U. AK Fairbanks all campuses	759	64	21	5	12	510	68	79
U. AK Southeast	36	0	0	0	1	30	4	1
California	48,500	285	5,984	1,849	4,625	20,341	5,581	9,835
Alliant International U.	927	10	92	62	99	489	143	32
Azusa Pacific U.	299	3	40	18	45	147	39	7
Biola U.	48	0	6	1	2	30	1	8
CA Institute of Integral Studies	350	1	38	10	21	220	60	0
CA Institute of Technology	717	1	96	15	28	348	8	221
CA State Polytechnic U. Pomona	480	2	107	17	87	140	68	59
CA State Polytechnic U. San Luis Obispo	288	2	8	2	31	184	54	7
CA State U. Bakersfield	145	2	13	15	47	48	17	3
CA State U. Chico	346	0	10	2	23	249	29	33
CA State U. Dominguez Hills	333	1	23	139	83	52	32	3
CA State U. East Bay	504	0	132	16	14	94	64	184
CA State U. Fresno	887	5	84	27	272	341	51	107
CA State U. Fullerton	1,134	4	203	24	153	408	148	194
CA State U. Long Beach	1,132	7	218	61	184	360	126	176
CA State U. Los Angeles	947	1	140	53	256	184	130	183
CA State U. Northridge	780	0	84	30	123	367	123	53
CA State U. Sacramento	1,124	14	121	53	142	542	139	113
CA State U. San Bernardino	369	0	23	25	75	154	53	39
CA State U. Stanislaus	237	3	19	12	57	102	41	3
Chapman U.	188	0	27	5	30	90	19	17
Claremont Graduate U.	747	2	74	31	52	241	161	186
Dominican U. CA	105	0	4	4	8	69	18	2
Fielding Institute, The	1,096	13	43	91	75	741	71	62
Fuller Theological Seminary CA	228	0	29	18	16	130	22	13
Golden Gate U.	204	0	34	28	31	64	34	13
Humboldt State U.	291	4	7	3	15	194	60	8
Loma Linda U.	299	1	49	40	44	132	0	33
Loyola Marymount U.	109	1	12	9	16	61	3	7
National U.	1,313	4	73	139	197	552	140	208
Naval Postgraduate School	941	7	47	52	55	572	114	94
Occidental C.	2	0	0	0	0	2	0	0
Pacific Graduate School of Psychology	343	2	66	6	23	191	35	20
Pacific States U.	13	0	0	0	0	0	0	13
Pardee RAND Graduate School of Policy Studies	115	0	13	1	1	59	0	41
Pepperdine U.	1,102	8	94	83	115	426	346	30
San Diego State U.	1,367	5	141	18	110	528	167	398
San Francisco State U.	1,254	6	187	69	159	483	214	136
San Jose State U.	1,715	5	326	34	167	422	165	596
Santa Clara U.	409	2	67	5	38	143	38	116
Sonoma State U.	25	0	0	0	0	9	14	2
Stanford U.	2,687	18	367	57	115	1,096	219	815
U. CA, Berkeley	3,358	48	393	89	220	1,577	408	623
U. CA, Davis	2,922	27	329	44	146	1,442	358	576
U. CA, Irvine	2,119	5	329	31	175	923	206	450
U. CA, Los Angeles	3,104	20	482	93	218	1,367	234	690
U. CA, Riverside	1,195	5	124	34	72	417	160	383
U. CA, San Diego	2,433	17	383	37	144	1,240	131	481
U. CA, San Francisco	473	2	86	9	41	211	92	32

TABLE 49. Graduate students in science fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
U. CA, Santa Barbara	1,496	5	113	23	95	753	247	260
U. CA, Santa Cruz	1,010	6	83	18	96	503	162	142
U. La Verne	357	0	29	54	106	98	62	8
U. San Diego	57	1	2	0	4	32	10	8
U. San Francisco	333	0	43	7	18	96	53	116
U. Southern CA	3,979	15	459	132	277	985	284	1,827
U. of the Pacific	64	0	12	3	4	33	8	4
Hawaii	1,802	7	401	12	42	700	139	501
U. HI Manoa	1,802	7	401	12	42	700	139	501
Oregon	3,683	43	142	40	103	2,347	367	641
OR Health & Science U.	185	1	9	0	5	116	15	39
OR State U.	1,310	19	55	4	42	790	84	316
Portland State U.	1,417	17	50	28	36	947	154	185
Southern OR U.	50	0	5	1	5	38	0	1
U. OR	721	6	23	7	15	456	114	100
Washington	5,993	61	407	113	236	3,687	548	941
Central WA U.	177	3	1	0	5	92	73	3
Eastern WA U.	268	7	10	6	18	195	23	9
Seattle U.	349	6	35	22	20	211	42	13
U. WA	3,909	36	323	73	152	2,351	332	642
Walla Walla U.	30	1	1	0	2	25	0	1
WA State U.	1,077	8	34	12	38	661	52	272
Western WA U.	183	0	3	0	1	152	26	1
Outlying areas	2,758	0	68	2	2,385	18	3	282
Guam	90	0	64	1	1	11	1	12
U. GU	90	0	64	1	1	11	1	12
Puerto Rico	2,668	0	4	1	2,384	7	2	270
Carlos Albizu U. (San Juan, PR)	250	0	0	0	250	0	0	0
Ponce School of Medicine	33	0	0	0	32	0	0	1
Pontifical Catholic U. PR, The	706	0	0	0	706	0	0	0
Universidad Central Del Caribe	23	0	0	0	23	0	0	0
U. PR Mayaguez Campus	483	0	0	0	342	0	0	141
U. PR Medical Sciences Campus	187	0	0	0	186	1	0	0
U. PR Rio Piedras Campus	986	0	4	1	845	6	2	128

^a Totals for "all institutions" and relevant regional and state totals include data imputed for non-responding institutions; these institutions are not listed separately.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 50. Graduate students in engineering fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							Temporary visa holders
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
All institutions ^a	144,677	344	9,927	4,172	5,218	50,396	8,585	66,035
New England	10,065	16	613	160	244	3,374	990	4,668
Connecticut	2,177	1	102	45	55	581	108	1,285
Rensselaer Hartford	398	0	38	17	35	251	57	0
U. Bridgeport	840	0	13	3	1	9	6	808
U. CT all campuses	515	0	26	12	12	194	13	258
U. Hartford	139	0	7	4	5	55	14	54
U. New Haven	121	0	4	8	1	24	8	76
Yale U.	164	1	14	1	1	48	10	89
Maine	179	3	6	0	0	93	19	58
U. ME	179	3	6	0	0	93	19	58
Massachusetts	6,850	10	481	102	174	2,261	825	2,997
Boston U.	553	1	47	8	11	151	90	245
Harvard U.	175	0	21	4	3	51	13	83
MA Institute of Technology	2,566	6	240	39	89	808	262	1,122
Northeastern U.	1,189	0	31	9	12	180	234	723
Tufts U.	445	0	38	6	5	183	118	95
U. MA Amherst	572	0	16	5	10	195	28	318
U. MA Boston	21	0	1	1	0	11	1	7
U. MA Dartmouth	155	0	5	2	4	57	2	85
U. MA Lowell	487	0	47	15	17	219	43	146
Western New England C.	38	0	4	2	1	25	6	0
Worcester Polytechnic Institute	649	3	31	11	22	381	28	173
New Hampshire	385	2	9	2	2	203	27	140
Dartmouth C.	189	1	8	1	1	75	16	87
U. NH	196	1	1	1	1	128	11	53
Rhode Island	363	0	11	11	13	169	11	148
Brown U.	142	0	6	0	5	40	6	85
U. RI	221	0	5	11	8	129	5	63
Vermont	111	0	4	0	0	67	0	40
Marlboro C.	1	0	0	0	0	1	0	0
U. VT	110	0	4	0	0	66	0	40
Middle Atlantic	20,710	29	1,492	538	630	6,135	1,609	10,277
New Jersey	4,885	10	495	174	213	1,207	677	2,109
Fairleigh Dickinson U. all campuses	77	0	0	0	0	0	9	68
Monmouth U.	65	0	13	6	4	28	8	6
NJ Institute of Technology	1,436	4	181	91	116	273	88	683
Princeton U.	511	1	42	14	15	170	10	259
Rutgers, The State U. NJ all campuses	747	4	49	12	10	228	75	369
Stevens Institute of Technology	2,038	1	208	50	68	501	487	723
U. of Medicine and Dentistry NJ	11	0	2	1	0	7	0	1
New York	9,825	10	653	232	303	2,576	767	5,284
Alfred U. all campuses	46	0	3	0	0	36	4	3
Clarkson U.	219	1	2	0	2	81	4	129
Columbia U. in the City of NY	1,250	1	104	10	13	212	109	801
Cooper Union	86	1	16	2	8	39	6	14
Cornell U. all campuses	1,492	1	134	25	61	518	152	601
CUNY Graduate Ctr.	123	0	8	6	6	4	27	72
CUNY The City C.	521	0	72	30	80	58	33	248
Manhattan C.	189	0	12	9	13	131	10	14

TABLE 50. Graduate students in engineering fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
NY Institute of Technology all campuses	379	1	19	19	20	71	61	188
Pace U. all campuses	27	0	3	0	3	11	7	3
Polytechnic U.	1,124	0	97	63	25	166	154	619
Rensselaer Polytechnic Institute	618	0	25	6	15	219	41	312
Rochester Institute of Technology	358	1	6	6	8	133	16	188
SUNY Albany	136	0	6	3	0	70	3	54
SUNY Binghamton	456	2	27	11	11	107	29	269
SUNY Buffalo all campuses	1,048	1	31	13	15	265	48	675
SUNY C. of Environmental Science and Forestry	93	0	2	1	1	45	0	44
SUNY Health Science Ctr. Brooklyn	13	0	3	2	0	5	0	3
SUNY Institute of Technology Utica-Rome	8	0	0	0	0	8	0	0
SUNY New Paltz	117	0	3	0	0	9	1	104
SUNY Stony Brook all campuses	449	0	43	11	8	89	6	292
Syracuse U. all campuses	686	0	18	13	10	163	29	453
Union Graduate C.	77	1	3	1	1	45	20	6
U. Rochester	310	0	16	1	3	91	7	192
Pennsylvania	6,000	9	344	132	114	2,352	165	2,884
Bucknell U.	21	0	2	0	0	17	1	1
Carnegie Mellon U.	1,091	1	78	31	12	299	16	654
Drexel U.	751	1	62	29	18	313	38	290
Gannon U.	116	1	1	0	0	5	4	105
Lehigh U.	541	0	16	4	5	239	21	256
PA State U. all campuses	1,678	2	61	22	41	582	33	937
Temple U.	131	1	13	1	1	20	11	84
U. PA	532	0	64	13	14	214	15	212
U. Pittsburgh all campuses	752	2	25	18	19	438	0	250
Villanova U.	314	1	19	14	4	206	17	53
Widener U. all campuses	39	0	3	0	0	11	8	17
Wilkes U.	34	0	0	0	0	8	1	25
East North Central ^a	23,375	29	1,169	513	457	8,117	1,591	11,499
Illinois	6,215	8	443	112	135	1,906	321	3,290
Bradley U.	158	1	1	0	0	40	4	112
IL Institute of Technology	1,294	0	43	20	18	252	111	850
Northern IL U.	262	1	59	3	5	71	10	113
Northwestern U.	855	2	78	10	20	277	86	382
Southern IL U. Carbondale	414	0	5	19	2	94	0	294
Southern IL U. Edwardsville	175	0	1	3	0	67	6	98
U. IL Chicago	890	2	100	31	35	294	54	374
U. IL Urbana-Champaign	2,167	2	156	26	55	811	50	1,067
Indiana	3,324	6	119	62	66	1,125	223	1,723
Ball State U.	95	0	0	0	0	0	95	0
IN U. all campuses	164	0	8	9	5	65	0	77
Purdue U. all campuses	2,522	3	97	50	50	810	93	1,419
Rose-Hulman Institute of Technology	120	0	5	1	2	71	7	34
U. of Notre Dame	423	3	9	2	9	179	28	193
Michigan ^a	5,633	9	359	182	123	2,010	229	2,721
Andrews U.	15	0	0	3	2	10	0	0
Central MI U.	20	0	0	0	0	4	0	16
Eastern MI U.	175	1	2	8	6	93	18	47
Grand Valley State U.	45	0	0	0	0	40	1	4
Lawrence Technological U.	404	1	30	22	4	204	16	127
MI State U.	620	1	18	18	15	160	9	399
MI Technological U.	596	0	7	4	10	207	21	347

TABLE 50. Graduate students in engineering fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
Oakland U.	288	1	31	7	3	147	18	81
U. MI all campuses	2,367	2	212	62	69	823	78	1,121
Wayne State U.	681	0	54	37	5	191	35	359
Western MI U.	227	1	1	13	4	61	5	142
Ohio	5,877	5	168	124	74	1,933	725	2,848
Air Force Institute of Technology	540	0	1	0	1	33	490	15
Case Western Reserve U.	535	3	31	13	5	182	32	269
Cleveland State U.	401	0	9	8	3	122	24	235
Miami U. all campuses	48	0	2	0	1	27	1	17
OH State U. all campuses	1,358	1	46	27	32	557	84	611
OH U. all campuses	251	0	0	3	2	81	0	165
U. Akron all campuses	376	0	9	3	2	114	2	246
U. Cincinnati all campuses	963	0	18	14	11	279	29	612
U. Dayton	453	0	14	31	9	208	25	166
U. Toledo	367	0	6	5	2	88	17	249
Wright State U. all campuses	530	1	31	20	6	212	21	239
Youngstown State U.	55	0	1	0	0	30	0	24
Wisconsin	2,326	1	80	33	59	1,143	93	917
Marquette U.	211	0	7	5	2	111	8	78
Milwaukee School of Engineering	60	0	3	2	1	44	9	1
U. WI La Crosse	57	0	1	0	0	22	1	33
U. WI Madison	1,367	1	44	17	40	568	50	647
U. WI Milwaukee	433	0	19	4	12	252	9	137
U. WI Platteville	118	0	3	4	2	89	9	11
U. WI Stout	80	0	3	1	2	57	7	10
West North Central	8,799	31	257	184	146	3,864	342	3,975
Iowa	1,440	5	36	27	24	608	37	703
IA State U.	1,046	5	25	16	20	435	29	516
U. IA	356	0	10	10	4	152	8	172
U. Northern IA	38	0	1	1	0	21	0	15
Kansas	1,718	11	54	19	28	726	83	797
KS State U.	490	4	10	5	13	320	2	136
Pittsburg State U.	44	0	0	0	2	25	1	16
U. KS all campuses	534	5	9	8	9	257	45	201
Wichita State U.	650	2	35	6	4	124	35	444
Minnesota	1,985	1	78	42	25	941	97	801
Mayo Graduate School	32	0	0	3	3	17	0	9
MN State U. Mankato	47	0	0	0	0	0	47	0
St. Cloud State U.	141	0	5	0	0	17	2	117
U. MN all campuses	1,668	1	68	25	19	854	29	672
Walden U.	97	0	5	14	3	53	19	3
Missouri	2,328	8	73	81	61	990	88	1,027
MO U. of Science & Technology	1,231	7	41	61	39	616	44	423
Southwest MO State U.	11	0	0	0	0	4	4	3
St. Louis U. all campuses	12	0	0	0	0	6	1	5
U. of Central MO	54	0	4	4	2	28	5	11
U. MO-Columbia	461	0	13	7	13	159	8	261
U. MO-Kansas City	247	1	8	4	2	40	19	173
Washington U. St. Louis	312	0	7	5	5	137	7	151
Nebraska	503	0	9	9	5	191	20	269
U. NE Lincoln	503	0	9	9	5	191	20	269

TABLE 50. Graduate students in engineering fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
North Dakota	468	5	7	6	1	235	10	204
ND State U. all campuses	331	4	6	3	0	170	6	142
U. ND all campuses	137	1	1	3	1	65	4	62
South Dakota	357	1	0	0	2	173	7	174
SD School of Mines and Technology	188	0	0	0	2	106	7	73
SD State U.	164	1	0	0	0	63	0	100
U. SD	5	0	0	0	0	4	0	1
South Atlantic	25,919	50	1,508	1,339	1,082	9,907	1,143	10,890
Delaware	486	1	17	5	5	193	4	261
U. DE	486	1	17	5	5	193	4	261
District of Columbia	1,500	6	116	138	71	575	320	274
Catholic U. America, The	258	0	14	21	27	111	51	34
George Washington U.	1,198	6	102	106	43	462	269	210
Howard U.	44	0	0	11	1	2	0	30
Florida	6,690	14	279	313	583	2,196	209	3,096
Embry-Riddle Aeronautical U.	145	2	8	5	4	61	10	55
FL A&M U.	102	0	1	56	2	26	5	12
FL Atlantic U.	218	0	18	13	28	78	3	78
FL Institute of Technology	385	0	12	6	17	115	75	160
FL International U.	513	0	20	26	158	55	13	241
FL State U.	249	1	4	22	13	69	4	136
U. Central FL	1,045	4	52	47	112	440	14	376
U. FL	2,998	5	100	70	148	953	64	1,658
U. Miami	271	0	10	10	38	92	17	104
U. South FL	764	2	54	58	63	307	4	276
Georgia	4,180	2	316	148	115	1,637	101	1,861
GA Institute of Technology all campuses	4,040	2	304	141	111	1,582	76	1,824
Mercer U. all campuses	84	0	12	4	4	37	24	3
U. GA	56	0	0	3	0	18	1	34
Maryland	2,967	7	291	250	93	991	105	1,230
Johns Hopkins U., The	753	1	108	19	20	241	6	358
Loyola C.	2	0	0	0	0	2	0	0
Morgan State U.	183	1	8	108	5	31	0	30
U. MD Baltimore County	241	0	22	27	9	73	11	99
U. MD College Park	1,788	5	153	96	59	644	88	743
North Carolina	3,744	4	192	266	70	1,582	62	1,568
Appalachian State U.	56	0	0	1	1	35	19	0
Duke U.	467	2	55	10	13	158	14	215
East Carolina U.	39	0	4	3	2	8	10	12
NC Agricultural and Technical State U.	296	0	17	156	3	34	5	81
NC State U.	2,388	2	96	67	46	1,125	6	1,046
U. NC Chapel Hill	77	0	5	8	0	42	0	22
U. NC Charlotte	394	0	12	20	5	162	8	187
Wake Forest U.	27	0	3	1	0	18	0	5
South Carolina	1,504	5	45	43	37	630	42	702
Clemson U.	1,079	3	27	31	24	449	36	509
U. SC all campuses	425	2	18	12	13	181	6	193
Virginia	4,226	10	245	165	102	1,858	283	1,563
C. of William and Mary all campuses	31	1	0	0	0	8	0	22
George Mason U.	601	2	60	21	27	185	163	143

TABLE 50. Graduate students in engineering fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							Temporary visa holders
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Hampton U.	34	0	0	29	0	3	0	2
Old Dominion U.	753	4	32	45	19	379	38	236
U. VA all campuses	583	0	45	17	11	301	6	203
VA Commonwealth U.	204	0	14	10	5	71	9	95
VA Polytechnic Institute and State U.	2,020	3	94	43	40	911	67	862
West Virginia	622	1	7	11	6	245	17	335
Marshall U.	67	0	1	0	1	48	8	9
WV U.	555	1	6	11	5	197	9	326
East South Central	5,402	11	161	330	74	2,660	66	2,100
Alabama	2,126	5	68	140	37	1,018	34	824
Auburn U. all campuses	870	2	17	43	11	376	8	413
Tuskegee U.	75	0	1	31	0	2	8	33
U. AL, The	307	1	10	14	6	138	5	133
U. AL Birmingham, The	166	0	26	20	7	77	7	29
U. AL Huntsville, The	527	2	10	28	9	406	4	68
U. South AL	181	0	4	4	4	19	2	148
Kentucky	904	2	21	26	12	491	18	334
U. KY all campuses	443	2	5	5	7	222	13	189
U. Louisville	461	0	16	21	5	269	5	145
Mississippi	684	0	15	60	10	293	0	306
Jackson State U.	44	0	0	24	1	10	0	9
MS State U.	548	0	13	34	8	261	0	232
U. MS all campuses	92	0	2	2	1	22	0	65
Tennessee	1,688	4	57	104	15	858	14	636
East TN State U.	47	0	1	7	3	29	2	5
TN State U.	79	0	7	31	1	20	0	20
TN Technological U.	142	0	2	3	1	46	0	90
U. Memphis, The	192	0	11	13	1	83	2	82
U. TN Chattanooga	69	0	6	4	1	44	0	14
U. TN Health Science Ctr.	18	0	1	0	0	10	0	7
U. TN Knoxville	790	3	18	29	5	430	10	295
Vanderbilt U.	351	1	11	17	3	196	0	123
West South Central	15,814	42	672	507	743	4,172	466	9,212
Arkansas	837	6	24	104	20	476	21	186
U. AR Little Rock	17	0	7	2	1	7	0	0
U. AR main campus	820	6	17	102	19	469	21	186
Louisiana	1,497	3	47	55	28	336	34	994
LA State U. all campuses	904	3	28	28	27	241	30	547
LA Tech U.	260	0	1	8	0	45	2	204
McNeese State U.	80	0	0	1	0	8	0	71
Southern U. and A&M C. all campuses	34	0	12	18	0	0	0	4
Tulane U.	66	0	2	0	0	31	1	32
U. LA Lafayette	153	0	4	0	1	11	1	136
Oklahoma	1,465	24	29	16	21	386	11	978
Northeastern State U.	20	4	1	0	0	13	0	2
OK State U. all campuses	600	4	2	1	4	95	2	492
U. OK all campuses	680	16	25	15	16	255	0	353
U. Tulsa	165	0	1	0	1	23	9	131
Texas	12,015	9	572	332	674	2,974	400	7,054
Baylor U.	18	0	1	1	1	7	0	8

TABLE 50. Graduate students in engineering fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							Temporary visa holders
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Lamar U.	497	1	8	6	1	14	134	333
Prairie View A&M U.	66	0	4	21	1	9	2	29
Rice U.	342	0	24	3	16	112	18	169
Southern Methodist U.	566	2	62	46	43	305	0	108
St. Mary's U. (San Antonio, TX)	38	0	3	2	10	5	4	14
TX A&M U. all campuses	3,105	3	50	47	95	653	185	2,072
TX A&M U. Corpus Christi	28	0	0	0	3	25	0	0
TX A&M U. Kingsville	370	0	5	3	30	16	0	316
TX Southern U.	109	0	20	65	5	8	4	7
TX Tech U.	718	0	7	9	37	266	8	391
U. Houston	844	1	70	20	32	178	6	537
U. Houston-Clear Lake	133	0	9	12	6	30	0	76
U. North TX	148	0	8	9	2	17	0	112
U. TX Arlington	1,296	1	56	33	34	215	13	944
U. TX Austin	2,091	1	139	14	73	799	7	1,058
U. TX Dallas	603	0	61	14	16	97	1	414
U. TX El Paso	291	0	6	5	86	15	1	178
U. TX Health Science Ctr. San Antonio	54	0	3	4	17	19	0	11
U. TX San Antonio	485	0	21	15	101	149	7	192
U. TX Southwestern Medical Ctr. Dallas	30	0	7	0	0	4	2	17
U. TX Tyler	40	0	4	2	0	15	0	19
U. TX-Pan American	130	0	3	1	64	8	8	46
West TX A&M U.	13	0	1	0	1	8	0	3
Mountain	10,357	70	439	136	518	5,158	577	3,459
Arizona	2,674	21	134	48	158	984	176	1,153
AZ State U. main campus	1,977	8	103	40	124	734	137	831
Northern AZ U.	39	4	1	0	1	22	1	10
U. AZ	658	9	30	8	33	228	38	312
Colorado	3,339	14	161	46	120	1,947	219	832
CO School of Mines	492	1	20	5	10	275	32	149
CO State U.	494	5	11	1	17	271	26	163
CO State U. Pueblo	18	0	0	0	1	5	0	12
U. CO all campuses	2,127	8	114	37	79	1,271	137	481
U. Denver	208	0	16	3	13	125	24	27
Idaho	702	3	34	11	18	430	42	164
Boise State U.	143	0	14	3	2	81	9	34
ID State U.	105	1	5	0	0	53	0	46
U. ID	454	2	15	8	16	296	33	84
Montana	273	7	15	2	2	231	1	15
MT State U. Bozeman	223	3	15	0	2	190	0	13
MT Tech of the U. MT	50	4	0	2	0	41	1	2
Nevada	500	3	52	8	22	171	30	214
U. NV, Las Vegas	256	2	31	7	18	95	15	88
U. NV, Reno	244	1	21	1	4	76	15	126
New Mexico	1,141	22	17	14	172	391	75	450
NM Institute of Mining and Technology	139	0	0	1	16	56	6	60
NM State U. all campuses	411	4	4	9	69	87	27	211
U. NM all campuses	591	18	13	4	87	248	42	179
Utah	1,541	0	24	7	24	927	25	534
Brigham Young U. all campuses	336	0	2	1	5	260	6	62
U. UT	867	0	21	5	16	500	11	314

TABLE 50. Graduate students in engineering fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	U.S. citizens and permanent residents							Temporary visa holders
	Total	American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
UT State U.	338	0	1	1	3	167	8	158
Wyoming	187	0	2	0	2	77	9	97
U. WY	187	0	2	0	2	77	9	97
Pacific	23,836	66	3,616	465	1,052	7,009	1,801	9,827
Alaska	146	4	6	3	0	75	8	50
U. AK Anchorage all campuses	46	2	4	0	0	34	3	3
U. AK Fairbanks all campuses	100	2	2	3	0	41	5	47
California	20,332	56	3,276	410	962	5,472	1,534	8,622
CA Institute of Technology	462	1	52	5	14	183	7	200
CA State Polytechnic U. Pomona	357	3	87	3	39	118	60	47
CA State Polytechnic U. San Luis Obispo	316	2	50	2	32	185	36	9
CA State U. Chico	21	0	1	0	0	6	2	12
CA State U. East Bay	66	0	11	2	7	11	5	30
CA State U. Fresno	81	0	9	0	7	18	6	41
CA State U. Fullerton	467	1	131	7	29	97	44	158
CA State U. Long Beach	507	1	129	21	44	87	37	188
CA State U. Los Angeles	394	0	61	21	53	22	18	219
CA State U. Northridge	549	0	60	8	53	109	61	258
CA State U. Sacramento	379	0	46	12	18	71	13	219
Humboldt State U.	5	0	0	0	0	4	1	0
Loyola Marymount U.	85	0	20	9	13	33	3	7
National U.	136	1	18	11	17	49	10	30
Naval Postgraduate School	1,330	9	65	78	78	805	160	135
San Diego State U.	404	0	43	6	24	85	26	220
San Francisco State U.	70	0	18	1	5	7	5	34
San Jose State U.	1,423	2	288	23	32	128	74	876
Santa Clara U.	508	1	128	7	21	121	53	177
Sonoma State U.	1	0	0	0	0	0	1	0
Stanford U.	2,890	9	431	57	94	738	216	1,345
U. CA, Berkeley	1,655	7	273	30	70	564	168	543
U. CA, Davis	752	2	117	9	29	258	73	264
U. CA, Irvine	704	1	146	2	18	111	87	339
U. CA, Los Angeles	1,471	1	369	23	64	407	94	513
U. CA, Riverside	285	0	27	3	14	37	13	191
U. CA, San Diego	1,039	4	200	4	37	286	54	454
U. CA, San Francisco	70	1	19	0	4	29	7	10
U. CA, Santa Barbara	498	2	51	4	15	184	30	212
U. CA, Santa Cruz	152	1	21	2	9	42	14	63
U. Southern CA	3,255	7	405	60	122	677	156	1,828
Hawaii	211	0	57	0	3	47	17	87
U. HI Manoa	211	0	57	0	3	47	17	87
Oregon	1,147	0	78	16	25	496	68	464
OR Health & Science U.	52	0	0	0	0	31	1	20
OR State U.	573	0	36	6	13	274	32	212
Portland State U.	521	0	42	10	12	191	35	231
U. Portland	1	0	0	0	0	0	0	1
Washington	2,000	6	199	36	62	919	174	604
Central WA U.	20	0	0	1	0	10	8	1
St. Martin's U.	17	0	3	0	1	8	0	5
Seattle U.	48	1	3	0	0	15	4	25
U. WA	1,459	5	181	31	55	706	143	338
WA State U.	456	0	12	4	6	180	19	235

TABLE 50. Graduate students in engineering fields in all institutions, by region, state, institution, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Region, state, and institution	Total	U.S. citizens and permanent residents						Temporary visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	White, non- Hispanic	Other or unknown		
Outlying areas	400	0	0	0	272	0	0	128
Puerto Rico	400	0	0	0	272	0	0	128
U. PR Mayaguez Campus	400	0	0	0	272	0	0	128

^a Totals for "all institutions" and relevant regional and state totals include data imputed for non-responding institutions; these institutions are not listed separately.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 51. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	510,335	518,641	527,048	542,073	551,832	561,352	574,241	573,883
Science and engineering	430,065	432,748	436,320	445,037	457,931	469,517	482,711	497,223
Science	310,580	316,260	321,920	328,413	334,662	345,094	351,988	360,501
Agricultural sciences	12,454	12,573	12,271	12,133	12,285	12,548	13,099	14,110
Biological sciences	60,923	62,834	64,540	65,861	67,267	67,507	68,199	68,580
Anatomy	908	897	938	961	979	867	764	833
Biochemistry	5,473	5,520	5,720	5,713	5,867	5,761	5,365	5,158
Biology	12,328	13,031	13,115	13,789	13,548	13,220	13,888	14,005
Biometry/epidemiology	4,439	4,674	4,805	4,789	5,483	5,694	5,956	5,682
Biophysics	1,032	1,180	1,183	1,203	1,214	1,193	1,084	1,042
Botany	1,900	1,830	1,859	1,848	1,888	1,818	1,801	1,830
Cell biology	5,521	5,697	6,030	6,388	6,547	6,690	6,948	6,970
Ecology	2,057	2,022	2,019	2,019	2,015	1,896	1,896	1,634
Entomology/parasitology	1,206	1,241	1,126	1,114	1,078	1,078	1,079	1,079
Genetics	2,008	2,077	2,095	2,096	2,096	2,064	2,072	2,242
Microbiology/immunology/virology	5,232	5,357	5,377	5,307	5,279	5,177	5,035	4,931
Nutrition	4,323	4,377	4,416	4,659	4,665	4,305	4,638	4,754
Pathology	1,541	1,557	1,593	1,612	1,633	1,580	1,618	1,450
Pharmacology	3,357	3,122	3,114	2,985	3,030	3,013	3,005	3,163
Physiology	2,179	2,240	2,221	2,238	2,242	2,574	2,687	2,776
Zoology	1,300	1,234	1,261	1,143	1,081	1,105	923	873
Biological sciences, nec	6,119	6,778	7,668	7,997	8,622	9,472	9,440	10,158
Communication ^a	ne	ne	ne	ne	ne	6,026	7,030	7,951
Computer sciences	47,058	44,462	43,080	43,032	44,066	43,555	44,171	45,593
Earth, atmospheric, and ocean sciences	13,628	14,149	13,981	14,032	13,812	13,359	13,663	13,942
Atmospheric sciences	1,138	1,077	1,139	1,071	1,110	1,171	1,394	1,348
Geosciences	6,515	6,944	6,904	6,856	6,781	6,719	6,766	7,141
Oceanography	2,584	2,705	2,659	2,674	2,559	2,511	2,532	2,527
Earth/atmospheric/ocean sciences, nec	3,391	3,423	3,279	3,431	3,362	2,958	2,971	2,926
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	2,491	3,007	3,084
Mathematical sciences	17,615	18,254	18,570	19,037	19,540	19,180	19,722	20,527
Mathematics/applied mathematics	13,803	14,383	14,572	15,004	15,207	14,841	14,894	15,679
Statistics	3,812	3,871	3,998	4,033	4,333	4,339	4,828	4,848
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	3,693	4,686	5,511
Neuroscience ^a	na	na	na	na	na	1,561	1,980	2,316
Physical sciences	33,465	34,866	35,435	35,928	36,036	35,768	36,320	37,098
Astronomy	1,080	1,119	1,191	1,211	1,233	1,232	1,275	1,409
Chemistry	19,513	20,219	20,483	20,716	20,695	20,569	20,884	21,374
Physics	12,344	13,082	13,274	13,509	13,589	13,575	13,636	13,834
Physical sciences, nec	528	446	487	492	519	392	525	481
Psychology	42,120	43,704	46,289	47,217	48,773	48,106	48,427	46,564
Clinical psychology	11,792	12,220	12,773	12,501	12,962	13,036	12,205	12,239
Psychology, general	11,672	11,640	12,126	12,133	13,281	13,013	13,133	11,841
Psychology, nec	18,656	19,844	21,390	22,583	22,530	22,057	23,089	22,484
Social sciences	83,317	85,418	87,754	91,173	92,883	91,300	91,684	95,225
Agricultural economics	2,318	2,195	2,121	2,151	2,120	1,983	2,126	2,215
Anthropology (cultural/social)	7,417	7,413	7,387	7,726	7,652	7,682	7,845	7,872
Economics (except agricultural)	11,540	11,649	11,160	11,438	11,659	11,928	12,275	13,200
Geography	4,255	4,295	4,259	4,228	4,089	4,089	4,148	4,196
History and philosophy of science	527	624	716	742	910	845	998	851
Linguistics	2,699	2,673	2,919	2,821	2,801	2,604	2,824	2,882

TABLE 51. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	31,347	33,097	34,701	36,118	36,296	35,806	35,342	37,744
Sociology	8,054	7,914	8,135	8,214	8,239	8,148	8,531	8,528
Sociology/anthropology	757	811	825	818	808	659	626	553
Social sciences, nec	14,403	14,747	15,531	16,917	18,309	17,556	16,969	17,184
Engineering	119,485	116,488	114,400	116,624	123,269	124,423	130,723	136,722
Aerospace engineering	3,969	3,997	4,055	4,357	4,480	4,480	4,761	5,096
Agricultural engineering	1,058	1,041	1,059	1,073	1,126	1,126	1,233	1,303
Architecture ^a	na	na	na	na	na	4,483	5,760	6,661
Biomedical engineering	5,250	5,749	6,015	6,430	6,848	6,871	7,334	7,879
Chemical engineering	7,376	7,334	7,054	7,151	7,291	7,492	7,794	8,077
Civil engineering ^a	18,156	17,881	17,455	17,158	19,189	15,461	16,169	17,708
Electrical engineering	38,326	36,132	35,248	35,948	37,708	37,887	38,248	38,070
Engineering science	2,187	2,134	1,910	1,967	1,824	1,772	1,932	2,004
Industrial engineering	13,481	12,951	12,760	12,959	13,333	13,504	14,758	14,626
Mechanical engineering	17,547	17,128	16,681	17,156	17,834	17,815	18,723	20,201
Metallurgical/materials engineering	5,075	4,998	5,115	5,223	5,310	5,259	5,486	5,822
Mining engineering	266	298	265	238	296	211	283	302
Nuclear engineering	885	971	1,013	1,099	1,208	1,180	1,201	1,243
Petroleum engineering	847	843	806	808	1,006	1,006	1,000	1,184
Engineering, nec	5,062	5,031	4,964	5,057	5,816	5,876	6,041	6,546
Health	80,270	85,893	90,728	97,036	93,901	91,835	91,530	76,660
Clinical medicine	19,507	19,863	20,403	22,425	23,573	21,686	22,803	22,670
Anesthesiology	891	1,027	1,042	1,042	589	589	294	163
Cardiology	36	39	33	32	26	26	45	45
Endocrinology	80	63	56	42	40	40	64	50
Gastroenterology	11	16	7	18	28	28	15	15
Hematology	25	30	13	14	9	9	8	11
Neurology ^a	2,665	2,642	2,763	2,959	3,358	1,751	1,462	1,323
Obstetrics/gynecology	28	17	21	54	81	81	83	89
Oncology/cancer research	234	274	331	341	355	264	260	272
Ophthalmology	413	423	394	414	407	379	1	1
Otorhinolaryngology	9	12	12	14	15	15	14	4
Pediatrics	429	424	278	284	302	302	207	186
Preventive medicine/community health	11,911	11,946	12,131	13,821	14,945	15,517	17,105	17,586
Psychiatry	216	348	250	274	278	218	188	233
Pulmonary disease	14	7	27	10	24	24	13	13
Radiology	246	211	215	225	270	281	320	385
Surgery	84	75	88	105	47	31	31	40
Clinical medicine, nec	2,215	2,309	2,742	2,776	2,799	2,131	2,693	2,254
Other health	60,763	66,030	70,325	74,611	70,328	70,149	68,727	53,990
Dental sciences	1,654	1,946	1,748	1,614	1,537	1,688	1,643	1,770
Nursing	22,160	25,081	26,699	29,760	27,901	27,901	26,779	18,706
Pharmaceutical sciences	5,492	5,218	6,088	6,311	4,959	5,061	4,245	4,435

TABLE 51. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	10,699	11,010	11,851	11,892	12,820	12,812	12,769	11,377
Veterinary sciences	1,719	1,732	1,970	2,067	2,020	2,371	2,478	2,170
Other health, nec	19,039	21,043	21,969	22,967	21,091	20,316	20,813	15,532

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 52. Graduate students in science, engineering, and health fields in public doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	363,967	363,543	366,019	372,074	379,576	387,725	396,733	399,013
Science and engineering	305,506	302,992	303,409	306,122	314,948	324,148	333,478	345,236
Science	215,443	216,561	219,780	222,064	225,512	233,884	238,463	245,153
Agricultural sciences	11,831	11,988	11,689	11,561	11,721	12,016	12,521	13,224
Biological sciences	43,285	43,632	45,094	45,934	46,790	46,594	46,699	46,533
Anatomy	643	611	646	607	638	510	456	528
Biochemistry	3,887	3,821	4,012	3,982	4,130	4,075	3,659	3,634
Biology	8,913	9,338	9,524	10,027	9,669	9,464	10,001	10,008
Biometry/epidemiology	2,856	2,724	2,782	2,881	3,105	3,260	3,357	3,134
Biophysics	680	732	739	772	766	745	676	641
Botany	1,826	1,759	1,787	1,773	1,812	1,742	1,726	1,753
Cell biology	3,607	3,640	3,903	4,149	4,285	4,396	4,581	4,522
Ecology	1,843	1,841	1,806	1,810	1,789	1,645	1,649	1,383
Entomology/parasitology	1,158	1,197	1,094	1,079	1,043	1,043	1,047	1,047
Genetics	1,253	1,231	1,285	1,286	1,285	1,228	1,233	1,247
Microbiology/immunology/virology	3,377	3,389	3,405	3,336	3,309	3,273	3,195	3,140
Nutrition	3,333	3,367	3,527	3,653	3,817	3,457	3,579	3,603
Pathology	995	998	958	1,006	955	867	859	824
Pharmacology	2,283	2,025	2,104	1,923	1,978	2,010	1,982	2,058
Physiology	1,248	1,274	1,272	1,358	1,396	1,691	1,774	1,854
Zoology	1,244	1,204	1,254	1,138	1,078	1,102	919	869
Biological sciences, nec	4,139	4,481	4,996	5,154	5,735	6,086	6,006	6,288
Communication ^a	ne	ne	ne	ne	ne	5,094	5,675	6,319
Computer sciences	30,088	27,826	27,166	26,903	27,407	27,026	27,698	29,133
Earth, atmospheric, and ocean sciences	11,428	11,823	11,641	11,656	11,509	11,051	11,218	11,489
Atmospheric sciences	1,102	1,033	1,082	1,039	1,059	1,120	1,328	1,287
Geosciences	5,362	5,717	5,689	5,627	5,648	5,586	5,580	5,960
Oceanography	2,165	2,276	2,181	2,196	2,104	2,056	2,028	2,033
Earth/atmospheric/ocean sciences, nec	2,799	2,797	2,689	2,794	2,698	2,289	2,282	2,209
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	2,291	2,645	2,675
Mathematical sciences	13,737	14,144	14,422	14,594	15,006	14,883	15,288	15,957
Mathematics/applied mathematics	10,691	11,064	11,300	11,457	11,632	11,521	11,553	12,275
Statistics	3,046	3,080	3,122	3,137	3,374	3,362	3,735	3,682
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,944	3,586	4,115
Neuroscience ^a	na	na	na	na	na	1,007	1,168	1,308
Physical sciences	24,579	25,685	26,341	26,520	26,502	26,234	26,566	27,342
Astronomy	637	663	690	679	698	697	704	821
Chemistry	14,378	14,928	15,309	15,394	15,263	15,137	15,373	15,872
Physics	9,043	9,655	9,862	9,963	10,030	10,016	10,085	10,295
Physical sciences, nec	521	439	480	484	511	384	404	354
Psychology	22,049	21,844	22,244	22,204	23,759	23,220	23,681	22,917
Clinical psychology	3,022	3,104	2,972	3,006	3,075	3,084	3,001	3,174
Psychology, general	8,018	7,924	8,483	8,752	8,671	8,608	8,909	8,185
Psychology, nec	11,009	10,816	10,789	10,446	12,013	11,528	11,771	11,558
Social sciences	58,446	59,619	61,183	62,692	62,818	61,524	61,718	64,141
Agricultural economics	2,246	2,110	2,049	2,081	2,047	1,910	2,045	2,130
Anthropology (cultural/social)	5,507	5,546	5,497	5,800	5,711	5,741	5,848	5,913
Economics (except agricultural)	7,771	8,008	7,689	7,834	7,814	7,956	8,132	8,783
Geography	3,956	3,999	3,986	3,921	3,771	3,771	3,807	3,848
History and philosophy of science	315	406	477	515	677	663	733	706
Linguistics	1,995	2,027	2,061	2,203	2,159	2,079	2,207	2,260

TABLE 52. Graduate students in science, engineering, and health fields in public doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	19,194	20,099	20,618	20,686	20,963	20,663	20,444	21,582
Sociology	6,005	5,958	6,121	6,186	6,239	6,213	6,643	6,559
Sociology/anthropology	623	676	687	711	728	579	542	467
Social sciences, nec	10,834	10,790	11,998	12,755	12,709	11,949	11,317	11,893
Engineering	90,063	86,431	83,629	84,058	89,436	90,264	95,015	100,083
Aerospace engineering	2,859	2,935	2,964	3,154	3,275	3,275	3,533	3,929
Agricultural engineering	993	979	999	1,011	1,059	1,059	1,173	1,230
Architecture ^a	na	na	na	na	na	3,610	4,597	5,362
Biomedical engineering	3,498	3,688	3,793	3,984	4,308	4,308	4,783	4,873
Chemical engineering	5,431	5,352	5,072	5,052	5,104	5,248	5,458	5,717
Civil engineering ^a	14,722	14,487	14,136	13,783	15,204	12,349	12,974	14,233
Electrical engineering	28,104	26,032	24,978	25,047	26,639	26,833	27,218	27,594
Engineering science	1,471	1,349	1,078	1,088	1,115	1,059	1,255	1,361
Industrial engineering	9,415	8,766	8,163	8,270	9,023	8,714	9,491	9,137
Mechanical engineering	13,898	13,168	12,536	12,686	12,814	12,795	13,321	14,502
Metallurgical/materials engineering	3,762	3,741	3,947	4,010	4,078	4,027	4,144	4,389
Mining engineering	261	298	265	238	296	211	283	302
Nuclear engineering	773	872	913	992	1,086	1,058	1,065	1,110
Petroleum engineering	727	706	690	696	887	887	854	1,009
Engineering, nec	4,149	4,058	4,095	4,047	4,548	4,831	4,866	5,335
Health	58,461	60,551	62,610	65,952	64,628	63,577	63,255	53,777
Clinical medicine	12,022	11,906	12,207	12,447	14,240	13,275	14,232	14,385
Anesthesiology	537	565	544	547	388	388	157	104
Cardiology	9	0	0	3	0	0	25	24
Endocrinology	78	62	56	42	40	40	44	50
Gastroenterology	11	16	7	18	19	19	7	13
Hematology	13	23	13	14	8	8	5	8
Neurology ^a	1,540	1,419	1,477	1,548	1,856	814	671	637
Obstetrics/gynecology	13	3	10	16	14	14	5	8
Oncology/cancer research	116	137	186	179	202	171	124	149
Ophthalmology	399	404	392	406	407	379	1	1
Otorhinolaryngology	9	12	12	12	12	12	14	4
Pediatrics	361	355	211	211	231	231	147	114
Preventive medicine/community health	7,373	7,170	7,367	7,531	8,738	9,115	10,389	10,872
Psychiatry	171	302	197	236	233	173	133	165
Pulmonary disease	14	6	26	9	10	10	12	13
Radiology	181	185	192	198	253	264	273	306
Surgery	75	68	81	99	40	24	18	28
Clinical medicine, nec	1,122	1,179	1,436	1,378	1,789	1,613	2,207	1,889
Other health	46,439	48,645	50,403	53,505	50,388	50,302	49,023	39,392
Dental sciences	1,365	1,629	1,447	1,311	1,190	1,298	1,333	1,303
Nursing	18,189	20,165	20,405	22,280	20,303	20,303	18,975	11,690
Pharmaceutical sciences	4,517	3,964	4,302	4,257	3,493	3,589	3,211	3,483

TABLE 52. Graduate students in science, engineering, and health fields in public doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	8,101	8,028	8,621	8,769	9,601	9,593	9,543	9,624
Veterinary sciences	1,667	1,674	1,858	1,951	1,872	2,124	2,244	1,981
Other health, nec	12,600	13,185	13,770	14,937	13,929	13,395	13,717	11,311

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 53. Graduate students in science, engineering, and health fields in private doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	146,368	155,098	161,029	169,999	172,256	173,627	177,508	174,870
Science and engineering	124,559	129,756	132,911	138,915	142,983	145,369	149,233	151,987
Science	95,137	99,699	102,140	106,349	109,150	111,210	113,525	115,348
Agricultural sciences	623	585	582	572	564	532	578	886
Biological sciences	17,638	19,202	19,446	19,927	20,477	20,913	21,500	22,047
Anatomy	265	286	292	354	341	357	308	305
Biochemistry	1,586	1,699	1,708	1,731	1,737	1,686	1,706	1,524
Biology	3,415	3,693	3,591	3,762	3,879	3,756	3,887	3,997
Biometry/epidemiology	1,583	1,950	2,023	1,908	2,378	2,434	2,599	2,548
Biophysics	352	448	444	431	448	448	408	401
Botany	74	71	72	75	76	76	75	77
Cell biology	1,914	2,057	2,127	2,239	2,262	2,294	2,367	2,448
Ecology	214	181	213	209	226	251	247	251
Entomology/parasitology	48	44	32	35	35	35	32	32
Genetics	755	846	810	810	811	836	839	995
Microbiology/immunology/virology	1,855	1,968	1,972	1,971	1,970	1,904	1,840	1,791
Nutrition	990	1,010	889	1,006	848	848	1,059	1,151
Pathology	546	559	635	606	678	713	759	626
Pharmacology	1,074	1,097	1,010	1,062	1,052	1,003	1,023	1,105
Physiology	931	966	949	880	846	883	913	922
Zoology	56	30	7	5	3	3	4	4
Biological sciences, nec	1,980	2,297	2,672	2,843	2,887	3,386	3,434	3,870
Communication ^a	ne	ne	ne	ne	ne	932	1,355	1,632
Computer sciences	16,970	16,636	15,914	16,129	16,659	16,529	16,473	16,460
Earth, atmospheric, and ocean sciences	2,200	2,326	2,340	2,376	2,303	2,308	2,445	2,453
Atmospheric sciences	36	44	57	32	51	51	66	61
Geosciences	1,153	1,227	1,215	1,229	1,133	1,133	1,186	1,181
Oceanography	419	429	478	478	455	455	504	494
Earth/atmospheric/ocean sciences, nec	592	626	590	637	664	669	689	717
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	200	362	409
Mathematical sciences	3,878	4,110	4,148	4,443	4,534	4,297	4,434	4,570
Mathematics/applied mathematics	3,112	3,319	3,272	3,547	3,575	3,320	3,341	3,404
Statistics	766	791	876	896	959	977	1,093	1,166
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	749	1,100	1,396
Neuroscience ^a	na	na	na	na	na	554	812	1,008
Physical sciences	8,886	9,181	9,094	9,408	9,534	9,534	9,754	9,756
Astronomy	443	456	501	532	535	535	571	588
Chemistry	5,135	5,291	5,174	5,322	5,432	5,432	5,511	5,502
Physics	3,301	3,427	3,412	3,546	3,559	3,559	3,551	3,539
Physical sciences, nec	7	7	7	8	8	8	121	127
Psychology	20,071	21,860	24,045	25,013	25,014	24,886	24,746	23,647
Clinical psychology	8,770	9,116	9,801	9,495	9,887	9,952	9,204	9,065
Psychology, general	3,654	3,716	3,643	3,381	4,610	4,405	4,224	3,656
Psychology, nec	7,647	9,028	10,601	12,137	10,517	10,529	11,318	10,926
Social sciences	24,871	25,799	26,571	28,481	30,065	29,776	29,966	31,084
Agricultural economics	72	85	72	70	73	73	81	85
Anthropology (cultural/social)	1,910	1,867	1,890	1,926	1,941	1,941	1,997	1,959
Economics (except agricultural)	3,769	3,641	3,471	3,604	3,845	3,972	4,143	4,417
Geography	299	296	273	307	318	318	341	348
History and philosophy of science	212	218	239	227	233	182	265	145
Linguistics	704	646	858	618	642	525	617	622

TABLE 53. Graduate students in science, engineering, and health fields in private doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	12,153	12,998	14,083	15,432	15,333	15,143	14,898	16,162
Sociology	2,049	1,956	2,014	2,028	2,000	1,935	1,888	1,969
Sociology/anthropology	134	135	138	107	80	80	84	86
Social sciences, nec	3,569	3,957	3,533	4,162	5,600	5,607	5,652	5,291
Engineering	29,422	30,057	30,771	32,566	33,833	34,159	35,708	36,639
Aerospace engineering	1,110	1,062	1,091	1,203	1,205	1,205	1,228	1,167
Agricultural engineering	65	62	60	62	67	67	60	73
Architecture ^a	na	na	na	na	na	873	1,163	1,299
Biomedical engineering	1,752	2,061	2,222	2,446	2,540	2,563	2,551	3,006
Chemical engineering	1,945	1,982	1,982	2,099	2,187	2,244	2,336	2,360
Civil engineering ^a	3,434	3,394	3,319	3,375	3,985	3,112	3,195	3,475
Electrical engineering	10,222	10,100	10,270	10,901	11,069	11,054	11,030	10,476
Engineering science	716	785	832	879	709	713	677	643
Industrial engineering	4,066	4,185	4,597	4,689	4,310	4,790	5,267	5,489
Mechanical engineering	3,649	3,960	4,145	4,470	5,020	5,020	5,402	5,699
Metallurgical/materials engineering	1,313	1,257	1,168	1,213	1,232	1,232	1,342	1,433
Mining engineering	5	0	0	0	0	0	0	0
Nuclear engineering	112	99	100	107	122	122	136	133
Petroleum engineering	120	137	116	112	119	119	146	175
Engineering, nec	913	973	869	1,010	1,268	1,045	1,175	1,211
Health	21,809	25,342	28,118	31,084	29,273	28,258	28,275	22,883
Clinical medicine	7,485	7,957	8,196	9,978	9,333	8,411	8,571	8,285
Anesthesiology	354	462	498	495	201	201	137	59
Cardiology	27	39	33	29	26	26	20	21
Endocrinology	2	1	0	0	0	0	20	0
Gastroenterology	0	0	0	0	9	9	8	2
Hematology	12	7	0	0	1	1	3	3
Neurology ^a	1,125	1,223	1,286	1,411	1,502	937	791	686
Obstetrics/gynecology	15	14	11	38	67	67	78	81
Oncology/cancer research	118	137	145	162	153	93	136	123
Ophthalmology	14	19	2	8	0	0	0	0
Otorhinolaryngology	0	0	0	2	3	3	0	0
Pediatrics	68	69	67	73	71	71	60	72
Preventive medicine/community health	4,538	4,776	4,764	6,290	6,207	6,402	6,716	6,714
Psychiatry	45	46	53	38	45	45	55	68
Pulmonary disease	0	1	1	1	14	14	1	0
Radiology	65	26	23	27	17	17	47	79
Surgery	9	7	7	6	7	7	13	12
Clinical medicine, nec	1,093	1,130	1,306	1,398	1,010	518	486	365
Other health	14,324	17,385	19,922	21,106	19,940	19,847	19,704	14,598
Dental sciences	289	317	301	303	347	390	310	467
Nursing	3,971	4,916	6,294	7,480	7,598	7,598	7,804	7,016
Pharmaceutical sciences	975	1,254	1,786	2,054	1,466	1,472	1,034	952

TABLE 53. Graduate students in science, engineering, and health fields in private doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	2,598	2,982	3,230	3,123	3,219	3,219	3,226	1,753
Veterinary sciences	52	58	112	116	148	247	234	189
Other health, nec	6,439	7,858	8,199	8,030	7,162	6,921	7,096	4,221

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 55. Graduate students in health fields in doctorate-granting institutions, by enrollment status, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2003–09

Enrollment status, citizenship, and race/ethnicity	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Full-time and part-time enrollment	80,270	85,893	90,728	97,036	93,901	91,835	91,530	76,660
U.S. citizens and permanent residents	73,130	78,777	83,361	89,100	85,944	84,112	83,360	68,427
American Indian/Alaska Native	449	445	463	500	539	531	584	421
Asian/Pacific Islander	5,541	6,264	6,387	6,758	6,357	6,131	5,763	5,127
Black, non-Hispanic	6,268	6,952	7,313	8,068	7,456	7,384	7,636	6,676
Hispanic	4,617	4,952	5,083	5,450	5,423	5,311	4,943	4,458
White, non-Hispanic	52,387	55,163	57,685	61,653	59,469	58,434	57,677	46,433
Other or unknown	3,868	5,001	6,430	6,671	6,700	6,321	6,757	5,312
Temporary visa holders	7,140	7,116	7,367	7,936	7,957	7,723	8,170	8,233
Full-time enrollment	51,897	55,329	57,827	61,756	61,292	59,288	59,943	52,287
U.S. citizens and permanent residents	46,045	49,380	51,652	55,188	54,872	53,111	53,399	45,609
American Indian/Alaska Native	276	280	277	294	346	339	368	284
Asian/Pacific Islander	3,859	4,237	4,495	4,806	4,490	4,290	3,969	3,511
Black, non-Hispanic	3,817	4,109	4,153	4,601	4,224	4,154	4,722	4,308
Hispanic	3,215	3,398	3,400	3,665	3,637	3,528	3,366	3,112
White, non-Hispanic	32,528	34,396	35,658	38,167	38,283	37,248	36,860	30,984
Other or unknown	2,350	2,960	3,669	3,655	3,892	3,552	4,114	3,410
Temporary visa holders	5,852	5,949	6,175	6,568	6,420	6,177	6,544	6,678
Part-time enrollment	28,373	30,564	32,901	35,280	32,609	32,547	31,587	24,373
U.S. citizens and permanent residents	27,085	29,397	31,709	33,912	31,072	31,001	29,961	22,818
American Indian/Alaska Native	173	165	186	206	193	192	216	137
Asian/Pacific Islander	1,682	2,027	1,892	1,952	1,867	1,841	1,794	1,616
Black, non-Hispanic	2,451	2,843	3,160	3,467	3,232	3,230	2,914	2,368
Hispanic	1,402	1,554	1,683	1,785	1,786	1,783	1,577	1,346
White, non-Hispanic	19,859	20,767	22,027	23,486	21,186	21,186	20,817	15,449
Other or unknown	1,518	2,041	2,761	3,016	2,808	2,769	2,643	1,902
Temporary visa holders	1,288	1,167	1,192	1,368	1,537	1,546	1,626	1,555

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 56. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						Temporary visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
All surveyed fields	573,883	2,706	34,362	32,189	27,589	274,000	39,700	163,337
Science and engineering	497,223	2,285	29,235	25,513	23,131	227,567	34,388	155,104
Science	360,501	1,968	20,291	21,545	18,399	179,512	26,489	92,297
Agricultural sciences	14,110	130	335	387	670	8,711	696	3,181
Biological sciences	68,580	312	5,771	3,302	3,398	34,721	4,258	16,818
Anatomy	833	3	83	27	50	456	44	170
Biochemistry	5,158	24	437	158	243	2,273	271	1,752
Biology	14,005	74	889	713	731	7,362	921	3,315
Biometry/epidemiology	5,682	28	703	461	265	2,344	423	1,458
Biophysics	1,042	5	108	31	40	497	44	317
Botany	1,830	11	96	22	50	875	70	706
Cell biology	6,970	43	731	244	362	3,268	416	1,906
Ecology	1,634	6	48	12	66	1,158	132	212
Entomology/parasitology	1,079	5	29	14	39	682	40	270
Genetics	2,242	4	167	83	75	1,194	114	605
Microbiology/immunology/virology	4,931	26	423	258	294	2,721	202	1,007
Nutrition	4,754	17	320	225	224	2,835	195	938
Pathology	1,450	5	133	109	62	731	102	308
Pharmacology	3,163	11	318	198	155	1,494	146	841
Physiology	2,776	7	294	130	115	1,483	185	562
Zoology	873	3	36	7	31	610	42	144
Biological sciences, nec	10,158	40	956	610	596	4,738	911	2,307
Communication	7,951	40	304	577	340	4,657	635	1,398
Computer sciences	45,593	120	3,408	1,820	1,151	14,079	2,945	22,070
Earth, atmospheric, and ocean sciences	13,942	70	382	284	542	9,017	933	2,714
Atmospheric sciences	1,348	7	40	39	46	847	71	298
Geosciences	7,141	41	166	100	240	4,631	476	1,487
Oceanography	2,527	12	39	41	138	1,662	175	460
Earth/atmospheric/ocean sciences, nec	2,926	10	137	104	118	1,877	211	469
Family and consumer sciences/ human sciences	3,084	22	99	394	105	2,048	97	319
Mathematical sciences	20,527	43	1,218	620	642	8,674	1,176	8,154
Mathematics/applied mathematics	15,679	39	867	505	540	7,224	979	5,525
Statistics	4,848	4	351	115	102	1,450	197	2,629
Multidisciplinary/interdisciplinary studies	5,511	48	255	342	285	2,897	692	992
Neuroscience	2,316	12	219	86	118	1,310	169	402
Physical sciences	37,098	114	1,752	928	1,193	16,521	1,791	14,799
Astronomy	1,409	7	66	6	37	764	89	440
Chemistry	21,374	72	1,092	712	773	9,408	983	8,334
Physics	13,834	29	539	190	373	6,040	707	5,956
Physical sciences, nec	481	6	55	20	10	309	12	69
Psychology	46,564	304	2,250	4,291	4,005	28,524	4,475	2,715
Clinical psychology	12,239	88	653	836	1,435	7,537	1,310	380
Psychology, general	11,841	86	584	1,037	681	7,534	965	954
Psychology, nec	22,484	130	1,013	2,418	1,889	13,453	2,200	1,381
Social sciences	95,225	753	4,298	8,514	5,950	48,353	8,622	18,735
Agricultural economics	2,215	11	64	64	48	929	74	1,025
Anthropology (cultural/social)	7,872	126	317	258	477	5,053	701	940
Economics (except agricultural)	13,200	27	597	379	404	4,287	798	6,708

TABLE 56. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	Temporary visa holders
Geography	4,196	23	119	92	130	2,768	298	766
History and philosophy of science	851	5	18	35	59	594	50	90
Linguistics	2,882	40	169	50	122	1,378	227	896
Political science	37,744	248	1,797	4,080	2,596	19,504	4,129	5,390
Sociology	8,528	61	391	959	598	4,786	561	1,172
Sociology/anthropology	553	5	8	76	42	319	62	41
Social sciences, nec	17,184	207	818	2,521	1,474	8,735	1,722	1,707
Engineering	136,722	317	8,944	3,968	4,732	48,055	7,899	62,807
Aerospace engineering	5,096	15	357	106	187	2,414	411	1,606
Agricultural engineering	1,303	1	24	30	27	513	35	673
Architecture	6,661	31	306	298	444	3,900	494	1,188
Biomedical engineering	7,879	20	1,113	244	300	3,126	410	2,666
Chemical engineering	8,077	14	505	172	219	2,769	258	4,140
Civil engineering	17,708	55	964	494	840	7,517	1,128	6,710
Electrical engineering	38,070	50	2,670	841	955	8,452	1,771	23,331
Engineering science	2,004	5	122	38	52	725	124	938
Industrial engineering	14,626	53	869	780	626	4,865	1,497	5,936
Mechanical engineering	20,201	38	1,104	408	648	7,939	1,015	9,049
Metallurgical/materials engineering	5,822	11	355	111	145	2,106	196	2,898
Mining engineering	302	0	10	8	10	147	12	115
Nuclear engineering	1,243	4	58	22	42	763	69	285
Petroleum engineering	1,184	1	25	21	20	173	7	937
Engineering, nec	6,546	19	462	395	217	2,646	472	2,335
Health	76,660	421	5,127	6,676	4,458	46,433	5,312	8,233
Clinical medicine	22,670	140	2,132	3,038	1,596	11,182	1,668	2,914
Anesthesiology	163	1	12	5	1	141	0	3
Cardiology	45	0	5	3	0	24	0	13
Endocrinology	50	0	4	4	1	27	5	9
Gastroenterology	15	0	2	2	0	10	0	1
Hematology	11	0	0	0	0	4	3	4
Neurology	1,323	3	127	48	67	749	77	252
Obstetrics/gynecology	89	0	8	8	9	51	3	10
Oncology/cancer research	272	1	21	13	9	157	22	49
Ophthalmology	1	0	1	0	0	0	0	0
Otorhinolaryngology	4	0	1	0	0	2	0	1
Pediatrics	186	1	13	5	12	96	26	33
Preventive medicine/community health	17,586	116	1,659	2,658	1,279	8,287	1,361	2,226
Psychiatry	233	1	8	44	83	85	1	11
Pulmonary disease	13	1	1	1	2	7	0	1
Radiology	385	2	35	7	14	191	40	96
Surgery	40	0	4	4	0	26	4	2
Clinical medicine, nec	2,254	14	231	236	119	1,325	126	203
Other health	53,990	281	2,995	3,638	2,862	35,251	3,644	5,319
Dental sciences	1,770	6	238	46	86	820	93	481
Nursing	18,706	139	1,024	1,755	888	12,962	1,487	451
Pharmaceutical sciences	4,435	12	366	226	152	1,371	180	2,128
Speech pathology/audiology	11,377	57	360	466	660	8,689	729	416
Veterinary sciences	2,170	5	63	59	62	1,263	98	620
Other health, nec	15,532	62	944	1,086	1,014	10,146	1,057	1,223

nec = not elsewhere classified.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 57. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	372,366	377,984	381,198	393,138	403,722	409,421	422,287	428,856
Science and engineering	320,469	322,655	323,371	331,382	342,430	350,133	362,344	376,569
Science	232,930	238,039	241,130	246,248	252,596	259,222	267,267	275,074
Agricultural sciences	9,537	9,509	9,185	8,977	9,103	9,276	9,564	10,246
Biological sciences	52,563	54,139	55,836	57,082	58,011	58,327	58,501	59,235
Anatomy	829	802	844	899	906	823	731	806
Biochemistry	5,288	5,294	5,432	5,391	5,534	5,451	5,026	4,831
Biology	10,010	10,499	10,758	11,286	11,101	10,833	11,323	11,550
Biometry/epidemiology	3,208	3,218	3,417	3,495	3,734	3,919	4,293	4,149
Biophysics	968	1,115	1,120	1,145	1,183	1,159	1,037	1,001
Botany	1,730	1,653	1,666	1,654	1,711	1,653	1,612	1,663
Cell biology	5,189	5,356	5,719	6,103	6,244	6,372	6,552	6,564
Ecology	1,455	1,495	1,568	1,560	1,700	1,590	1,590	1,391
Entomology/parasitology	1,024	1,046	943	947	926	926	910	892
Genetics	1,927	1,998	2,010	2,005	2,018	1,993	2,009	2,175
Microbiology/immunology/virology	4,971	5,070	5,058	5,008	4,973	4,879	4,732	4,638
Nutrition	3,185	3,151	3,212	3,264	3,374	3,118	3,264	3,376
Pathology	1,319	1,367	1,375	1,400	1,406	1,386	1,384	1,308
Pharmacology	2,926	2,974	2,905	2,818	2,808	2,789	2,743	2,884
Physiology	2,059	2,094	2,066	2,067	2,036	2,327	2,480	2,549
Zoology	1,093	1,070	1,091	992	961	973	724	659
Biological sciences, nec	5,382	5,937	6,652	7,048	7,396	8,136	8,091	8,799
Communication ^a	ne	ne	ne	ne	ne	4,049	4,642	5,429
Computer sciences	28,284	27,204	26,524	26,937	28,285	27,874	28,850	29,669
Earth, atmospheric, and ocean sciences	11,076	11,265	10,999	11,102	10,973	10,570	10,874	11,211
Atmospheric sciences	1,016	958	999	928	953	1,005	1,166	1,127
Geosciences	5,404	5,504	5,392	5,372	5,325	5,266	5,258	5,629
Oceanography	2,209	2,252	2,165	2,197	2,151	2,118	2,096	2,173
Earth/atmospheric/ocean sciences, nec	2,447	2,551	2,443	2,605	2,544	2,181	2,354	2,282
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	1,489	1,754	1,903
Mathematical sciences	13,988	14,357	14,652	14,995	15,311	15,013	15,636	16,328
Mathematics/applied mathematics	11,037	11,394	11,495	11,805	11,958	11,650	11,948	12,422
Statistics	2,951	2,963	3,157	3,190	3,353	3,363	3,688	3,906
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,076	2,818	3,420
Neuroscience ^a	na	na	na	na	na	1,529	1,908	2,261
Physical sciences	30,060	31,267	31,921	32,368	32,548	32,327	32,747	33,671
Astronomy	1,023	1,078	1,129	1,158	1,186	1,185	1,233	1,348
Chemistry	17,424	18,022	18,422	18,606	18,600	18,486	18,692	19,304
Physics	11,336	11,931	12,124	12,344	12,486	12,473	12,528	12,679
Physical sciences, nec	277	236	246	260	276	183	294	340
Psychology	30,345	32,111	32,781	32,944	34,801	34,286	35,866	34,585
Clinical psychology	8,968	9,396	9,699	9,382	9,786	9,856	9,473	9,507
Psychology, general	9,269	9,220	9,580	9,619	10,187	9,947	10,460	9,451
Psychology, nec	12,108	13,495	13,502	13,943	14,828	14,483	15,933	15,627
Social sciences	57,077	58,187	59,232	61,843	63,564	62,406	64,107	67,116
Agricultural economics	2,043	1,888	1,826	1,831	1,851	1,757	1,865	1,892
Anthropology (cultural/social)	5,776	5,669	5,729	6,055	6,088	6,100	6,231	6,238
Economics (except agricultural)	9,620	9,663	9,395	9,645	9,760	9,937	10,119	10,953
Geography	2,942	2,952	2,967	2,971	2,938	2,938	3,057	3,113
History and philosophy of science	379	427	483	508	667	602	762	611
Linguistics	2,257	2,259	2,403	2,380	2,333	2,155	2,239	2,262

TABLE 57. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	18,235	19,327	20,196	21,212	21,749	21,495	22,067	24,190
Sociology	6,307	6,116	6,286	6,382	6,298	6,225	6,566	6,630
Sociology/anthropology	548	584	591	565	546	415	381	294
Social sciences, nec	8,970	9,302	9,356	10,294	11,334	10,782	10,820	10,933
Engineering	87,539	84,616	82,241	85,134	89,834	90,911	95,077	101,495
Aerospace engineering	3,206	3,190	3,150	3,291	3,379	3,379	3,588	3,845
Agricultural engineering	900	842	855	893	917	917	1,022	1,084
Architecture ^a	na	na	na	na	na	3,981	5,092	5,988
Biomedical engineering	4,691	5,015	5,232	5,641	5,885	5,908	6,260	6,840
Chemical engineering	6,373	6,346	6,110	6,185	6,249	6,433	6,722	7,058
Civil engineering ^a	13,443	13,348	12,958	12,836	14,352	11,063	11,619	13,120
Electrical engineering	27,680	25,783	25,002	26,259	27,522	27,646	27,813	27,792
Engineering science	1,751	1,712	1,589	1,639	1,437	1,402	1,444	1,450
Industrial engineering	6,879	6,352	5,822	6,171	6,727	7,109	7,852	7,878
Mechanical engineering	13,119	12,478	11,984	12,408	12,913	12,903	13,456	15,215
Metallurgical/materials engineering	4,375	4,338	4,491	4,606	4,647	4,593	4,784	5,166
Mining engineering	208	229	200	177	199	132	201	205
Nuclear engineering	752	809	840	910	960	951	941	968
Petroleum engineering	682	658	629	642	786	786	822	988
Engineering, nec	3,480	3,516	3,379	3,476	3,861	3,708	3,461	3,898
Health	51,897	55,329	57,827	61,756	61,292	59,288	59,943	52,287
Clinical medicine	14,134	14,466	14,555	16,005	16,795	14,805	16,310	16,018
Anesthesiology	715	841	842	904	555	555	291	161
Cardiology	30	39	33	32	26	26	38	36
Endocrinology	56	57	52	42	37	37	60	47
Gastroenterology	11	13	3	17	28	28	15	15
Hematology	25	24	9	14	9	9	8	9
Neurology ^a	2,573	2,561	2,684	2,883	3,282	1,707	1,416	1,284
Obstetrics/gynecology	20	13	16	47	71	71	65	69
Oncology/cancer research	232	270	329	340	355	264	260	258
Ophthalmology	393	406	380	389	385	378	1	1
Otorhinolaryngology	9	6	6	8	7	7	9	2
Pediatrics	349	327	225	245	267	267	169	162
Preventive medicine/community health	7,528	7,598	7,340	8,374	8,975	9,237	11,310	11,753
Psychiatry	67	184	117	126	153	93	95	114
Pulmonary disease	10	7	27	10	23	23	13	12
Radiology	208	171	189	183	213	224	225	271
Surgery	67	59	70	85	45	29	17	26
Clinical medicine, nec	1,841	1,890	2,233	2,306	2,364	1,850	2,318	1,798
Other health	37,763	40,863	43,272	45,751	44,497	44,483	43,633	36,269
Dental sciences	1,514	1,763	1,494	1,340	1,265	1,406	1,372	1,564
Nursing	9,313	9,938	10,808	11,795	11,746	11,746	11,790	8,683
Pharmaceutical sciences	3,515	3,633	4,254	4,480	3,755	3,851	2,978	3,179

TABLE 57. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	8,306	8,674	9,015	9,318	10,067	10,048	9,909	9,804
Veterinary sciences	1,391	1,364	1,532	1,663	1,634	1,891	1,860	1,637
Other health, nec	13,724	15,491	16,169	17,155	16,030	15,541	15,724	11,402

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 58. U.S. citizen and permanent resident full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	243,685	252,234	257,136	265,971	272,871	277,350	283,233	285,340
Science and engineering	197,640	202,854	205,484	210,783	217,999	224,239	229,834	239,731
Science	160,138	165,294	167,886	171,566	176,960	182,599	186,458	192,607
Agricultural sciences	7,209	7,115	6,811	6,631	6,738	6,778	6,906	7,489
Biological sciences	38,913	39,611	40,654	41,621	42,740	43,282	42,767	43,648
Anatomy	639	632	664	689	717	648	566	640
Biochemistry	3,449	3,369	3,421	3,400	3,714	3,671	3,232	3,176
Biology	7,810	8,072	8,109	8,514	8,205	8,024	8,333	8,562
Biometry/epidemiology	2,179	2,212	2,412	2,468	2,641	2,748	3,121	2,914
Biophysics	658	753	751	768	807	802	704	692
Botany	1,172	1,088	1,034	993	1,038	995	957	991
Cell biology	3,865	3,835	4,123	4,374	4,504	4,605	4,663	4,727
Ecology	1,236	1,273	1,362	1,342	1,476	1,392	1,379	1,201
Entomology/parasitology	753	761	673	676	699	699	668	637
Genetics	1,432	1,446	1,452	1,430	1,463	1,465	1,417	1,586
Microbiology/immunology/virology	3,849	3,875	3,876	3,941	3,940	3,870	3,724	3,671
Nutrition	2,160	2,168	2,221	2,290	2,427	2,292	2,359	2,574
Pathology	1,001	1,067	1,058	1,092	1,134	1,132	1,059	1,011
Pharmacology	2,185	2,198	2,083	2,099	2,068	2,056	1,975	2,076
Physiology	1,558	1,616	1,621	1,623	1,650	1,913	1,942	2,012
Zoology	931	897	905	820	809	820	595	540
Biological sciences, nec	4,036	4,349	4,889	5,102	5,448	6,150	6,073	6,638
Communication ^a	ne	ne	ne	ne	ne	3,145	3,594	4,222
Computer sciences	11,766	11,877	11,491	11,346	11,405	11,188	11,006	11,367
Earth, atmospheric, and ocean sciences	8,589	8,731	8,523	8,621	8,567	8,255	8,399	8,703
Atmospheric sciences	741	704	725	696	717	747	868	844
Geosciences	4,097	4,183	4,112	4,070	4,032	4,023	4,009	4,261
Oceanography	1,747	1,775	1,704	1,722	1,742	1,715	1,661	1,733
Earth/atmospheric/ocean sciences, nec	2,004	2,069	1,982	2,133	2,076	1,770	1,861	1,865
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	1,292	1,488	1,641
Mathematical sciences	7,407	7,774	8,012	8,271	8,581	8,461	8,490	8,817
Mathematics/applied mathematics	6,268	6,614	6,763	7,032	7,231	7,097	7,063	7,291
Statistics	1,139	1,160	1,249	1,239	1,350	1,364	1,427	1,526
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	1,560	2,080	2,577
Neuroscience ^a	na	na	na	na	na	1,203	1,543	1,864
Physical sciences	16,904	17,774	18,249	18,651	19,087	18,928	19,057	19,688
Astronomy	706	717	773	795	809	808	837	921
Chemistry	10,176	10,630	10,863	11,023	11,160	11,094	11,027	11,476
Physics	5,821	6,243	6,429	6,653	6,872	6,866	6,952	7,011
Physical sciences, nec	201	184	184	180	246	160	241	280
Psychology	28,061	29,912	30,456	30,725	32,404	31,962	33,494	32,255
Clinical psychology	8,561	9,073	9,323	9,052	9,424	9,489	9,167	9,191
Psychology, general	8,389	8,343	8,650	8,802	9,322	9,097	9,553	8,604
Psychology, nec	11,111	12,496	12,483	12,871	13,658	13,376	14,774	14,460
Social sciences	41,289	42,500	43,690	45,700	47,438	46,545	47,634	50,336
Agricultural economics	1,024	985	932	938	962	909	933	931
Anthropology (cultural/social)	5,052	4,923	4,968	5,236	5,244	5,256	5,363	5,403
Economics (except agricultural)	3,707	3,813	3,726	3,858	3,919	4,041	4,160	4,784
Geography	2,307	2,310	2,340	2,351	2,359	2,359	2,414	2,442
History and philosophy of science	315	363	406	422	578	532	671	530

TABLE 58. U.S. citizen and permanent resident full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Linguistics	1,393	1,371	1,588	1,548	1,561	1,426	1,462	1,455
Political science	14,230	15,308	16,174	16,832	17,416	17,227	17,591	19,433
Sociology	5,132	5,000	5,171	5,280	5,247	5,181	5,547	5,605
Sociology/anthropology	487	511	508	484	477	375	337	262
Social sciences, nec	7,642	7,916	7,877	8,751	9,675	9,239	9,156	9,491
Engineering	37,502	37,560	37,598	39,217	41,039	41,640	43,376	47,124
Aerospace engineering	1,663	1,672	1,689	1,985	2,049	2,049	2,201	2,373
Agricultural engineering	451	430	392	388	401	401	425	483
Architecture ^a	na	na	na	na	na	3,147	4,115	4,877
Biomedical engineering	2,938	3,160	3,356	3,693	3,867	3,884	4,086	4,467
Chemical engineering	2,893	2,972	2,903	2,957	2,916	3,002	3,055	3,264
Civil engineering ^a	7,110	7,303	7,297	7,354	8,633	6,007	6,213	7,277
Electrical engineering	8,860	8,339	8,362	8,360	8,167	8,188	8,242	8,032
Engineering science	877	822	806	845	748	715	744	714
Industrial engineering	2,584	2,406	2,363	2,663	2,510	2,732	3,003	3,025
Mechanical engineering	5,698	5,679	5,603	5,893	6,274	6,267	6,415	7,242
Metallurgical/materials engineering	1,950	1,983	2,057	2,225	2,247	2,225	2,292	2,470
Mining engineering	110	128	104	75	98	59	90	103
Nuclear engineering	412	470	515	610	706	704	691	702
Petroleum engineering	92	118	103	104	133	133	110	135
Engineering, nec	1,864	2,078	2,048	2,065	2,290	2,127	1,694	1,960
Health	46,045	49,380	51,652	55,188	54,872	53,111	53,399	45,609
Clinical medicine	11,934	12,346	12,497	13,749	14,354	12,693	14,064	13,727
Anesthesiology	702	833	835	893	553	553	289	159
Cardiology	15	23	16	16	18	18	26	28
Endocrinology	32	38	45	32	29	29	53	38
Gastroenterology	9	13	3	16	23	23	13	14
Hematology	18	23	8	12	7	7	4	5
Neurology ^a	2,087	2,041	2,125	2,288	2,649	1,393	1,138	1,035
Obstetrics/gynecology	15	9	10	44	56	56	57	61
Oncology/cancer research	199	225	253	269	297	213	213	213
Ophthalmology	375	383	367	373	372	372	1	1
Otorhinolaryngology	9	6	6	7	7	7	9	2
Pediatrics	308	285	169	200	228	228	134	129
Preventive medicine/community health	6,235	6,399	6,278	7,140	7,539	7,750	9,741	10,083
Psychiatry	58	171	103	117	145	85	85	106
Pulmonary disease	5	7	21	9	22	22	11	11
Radiology	146	114	143	125	175	186	157	179
Surgery	63	52	68	83	43	27	16	25
Clinical medicine, nec	1,658	1,724	2,047	2,125	2,191	1,724	2,117	1,638
Other health	34,111	37,034	39,155	41,439	40,518	40,418	39,335	31,882
Dental sciences	1,230	1,477	1,252	1,085	971	1,067	1,065	1,156
Nursing	8,954	9,555	10,430	11,362	11,424	11,424	11,412	8,337
Pharmaceutical sciences	2,084	2,159	2,659	2,830	2,255	2,331	1,304	1,365

TABLE 58. U.S. citizen and permanent resident full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	7,973	8,344	8,648	8,929	9,649	9,641	9,522	9,432
Veterinary sciences	1,042	1,023	1,151	1,258	1,247	1,409	1,357	1,114
Other health, nec	12,828	14,476	15,015	15,975	14,972	14,546	14,675	10,478

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 59. Full-time graduate students with temporary visas in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	128,681	125,750	124,062	127,167	130,851	132,071	139,054	143,516
Science and engineering	122,829	119,801	117,887	120,599	124,431	125,894	132,510	136,838
Science	72,792	72,745	73,244	74,682	75,636	76,623	80,809	82,467
Agricultural sciences	2,328	2,394	2,374	2,346	2,365	2,498	2,658	2,757
Biological sciences	13,650	14,528	15,182	15,461	15,271	15,045	15,734	15,587
Anatomy	190	170	180	210	189	175	165	166
Biochemistry	1,839	1,925	2,011	1,991	1,820	1,780	1,794	1,655
Biology	2,200	2,427	2,649	2,772	2,896	2,809	2,990	2,988
Biometry/epidemiology	1,029	1,006	1,005	1,027	1,093	1,171	1,172	1,235
Biophysics	310	362	369	377	376	357	333	309
Botany	558	565	632	661	673	658	655	672
Cell biology	1,324	1,521	1,596	1,729	1,740	1,767	1,889	1,837
Ecology	219	222	206	218	224	198	211	190
Entomology/parasitology	271	285	270	271	227	227	242	255
Genetics	495	552	558	575	555	528	592	589
Microbiology/immunology/virology	1,122	1,195	1,182	1,067	1,033	1,009	1,008	967
Nutrition	1,025	983	991	974	947	826	905	802
Pathology	318	300	317	308	272	254	325	297
Pharmacology	741	776	822	719	740	733	768	808
Physiology	501	478	445	444	386	414	538	537
Zoology	162	173	186	172	152	153	129	119
Biological sciences, nec	1,346	1,588	1,763	1,946	1,948	1,986	2,018	2,161
Communication ^a	ne	ne	ne	ne	ne	904	1,048	1,207
Computer sciences	16,518	15,327	15,033	15,591	16,880	16,686	17,844	18,302
Earth, atmospheric, and ocean sciences	2,487	2,534	2,476	2,481	2,406	2,315	2,475	2,508
Atmospheric sciences	275	254	274	232	236	258	298	283
Geosciences	1,307	1,321	1,280	1,302	1,293	1,243	1,249	1,368
Oceanography	462	477	461	475	409	403	435	440
Earth/atmospheric/ocean sciences, nec	443	482	461	472	468	411	493	417
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	197	266	262
Mathematical sciences	6,581	6,583	6,640	6,724	6,730	6,552	7,146	7,511
Mathematics/applied mathematics	4,769	4,780	4,732	4,773	4,727	4,553	4,885	5,131
Statistics	1,812	1,803	1,908	1,951	2,003	1,999	2,261	2,380
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	516	738	843
Neuroscience ^a	na	na	na	na	na	326	365	397
Physical sciences	13,156	13,493	13,672	13,717	13,461	13,399	13,690	13,983
Astronomy	317	361	356	363	377	377	396	427
Chemistry	7,248	7,392	7,559	7,583	7,440	7,392	7,665	7,828
Physics	5,515	5,688	5,695	5,691	5,614	5,607	5,576	5,668
Physical sciences, nec	76	52	62	80	30	23	53	60
Psychology	2,284	2,199	2,325	2,219	2,397	2,324	2,372	2,330
Clinical psychology	407	323	376	330	362	367	306	316
Psychology, general	880	877	930	817	865	850	907	847
Psychology, nec	997	999	1,019	1,072	1,170	1,107	1,159	1,167
Social sciences	15,788	15,687	15,542	16,143	16,126	15,861	16,473	16,780
Agricultural economics	1,019	903	894	893	889	848	932	961
Anthropology (cultural/social)	724	746	761	819	844	844	868	835
Economics (except agricultural)	5,913	5,850	5,669	5,787	5,841	5,896	5,959	6,169
Geography	635	642	627	620	579	579	643	671
History and philosophy of science	64	64	77	86	89	70	91	81

TABLE 59. Full-time graduate students with temporary visas in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Linguistics	864	888	815	832	772	729	777	807
Political science	4,005	4,019	4,022	4,380	4,333	4,268	4,476	4,757
Sociology	1,175	1,116	1,115	1,102	1,051	1,044	1,019	1,025
Sociology/anthropology	61	73	83	81	69	40	44	32
Social sciences, nec	1,328	1,386	1,479	1,543	1,659	1,543	1,664	1,442
Engineering	50,037	47,056	44,643	45,917	48,795	49,271	51,701	54,371
Aerospace engineering	1,543	1,518	1,461	1,306	1,330	1,330	1,387	1,472
Agricultural engineering	449	412	463	505	516	516	597	601
Architecture ^a	na	na	na	na	na	834	977	1,111
Biomedical engineering	1,753	1,855	1,876	1,948	2,018	2,024	2,174	2,373
Chemical engineering	3,480	3,374	3,207	3,228	3,333	3,431	3,667	3,794
Civil engineering ^a	6,333	6,045	5,661	5,482	5,719	5,056	5,406	5,843
Electrical engineering	18,820	17,444	16,640	17,899	19,355	19,458	19,571	19,760
Engineering science	874	890	783	794	689	687	700	736
Industrial engineering	4,295	3,946	3,459	3,508	4,217	4,377	4,849	4,853
Mechanical engineering	7,421	6,799	6,381	6,515	6,639	6,636	7,041	7,973
Metallurgical/materials engineering	2,425	2,355	2,434	2,381	2,400	2,368	2,492	2,696
Mining engineering	98	101	96	102	101	73	111	102
Nuclear engineering	340	339	325	300	254	247	250	266
Petroleum engineering	590	540	526	538	653	653	712	853
Engineering, nec	1,616	1,438	1,331	1,411	1,571	1,581	1,767	1,938
Health	5,852	5,949	6,175	6,568	6,420	6,177	6,544	6,678
Clinical medicine	2,200	2,120	2,058	2,256	2,441	2,112	2,246	2,291
Anesthesiology	13	8	7	11	2	2	2	2
Cardiology	15	16	17	16	8	8	12	8
Endocrinology	24	19	7	10	8	8	7	9
Gastroenterology	2	0	0	1	5	5	2	1
Hematology	7	1	1	2	2	2	4	4
Neurology ^a	486	520	559	595	633	314	278	249
Obstetrics/gynecology	5	4	6	3	15	15	8	8
Oncology/cancer research	33	45	76	71	58	51	47	45
Ophthalmology	18	23	13	16	13	6	0	0
Otorhinolaryngology	0	0	0	1	0	0	0	0
Pediatrics	41	42	56	45	39	39	35	33
Preventive medicine/community health	1,293	1,199	1,062	1,234	1,436	1,487	1,569	1,670
Psychiatry	9	13	14	9	8	8	10	8
Pulmonary disease	5	0	6	1	1	1	2	1
Radiology	62	57	46	58	38	38	68	92
Surgery	4	7	2	2	2	2	1	1
Clinical medicine, nec	183	166	186	181	173	126	201	160
Other health	3,652	3,829	4,117	4,312	3,979	4,065	4,298	4,387
Dental sciences	284	286	242	255	294	339	307	408
Nursing	359	383	378	433	322	322	378	346
Pharmaceutical sciences	1,431	1,474	1,595	1,650	1,500	1,520	1,674	1,814

TABLE 59. Full-time graduate students with temporary visas in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	333	330	367	389	418	407	387	372
Veterinary sciences	349	341	381	405	387	482	503	523
Other health, nec	896	1,015	1,154	1,180	1,058	995	1,049	924

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support:
2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All sources	372,366	377,984	381,198	393,138	403,722	409,421	422,287	428,856
Federal	80,807	82,597	82,328	82,901	80,403	80,691	76,903	80,244
DOD	9,170	8,967	8,948	8,826	8,809	8,820	8,180	8,649
DOE	4,020	4,130	4,386	4,469	4,277	4,280	4,335	4,601
HHS	28,910	30,613	30,489	31,028	29,852	29,904	28,354	28,638
NIH	24,238	26,617	26,798	27,543	26,885	26,918	25,913	26,454
Other HHS	4,672	3,996	3,691	3,485	2,967	2,986	2,441	2,184
NASA	3,188	2,900	2,672	2,352	2,309	2,312	2,328	2,418
NSF	19,214	19,859	20,257	20,255	19,668	19,713	19,805	21,602
USDA	3,465	3,552	3,339	2,994	2,790	2,804	2,759	2,697
Other	12,840	12,576	12,237	12,977	12,698	12,858	11,142	11,639
Institutional	146,449	149,182	150,941	154,856	162,019	165,084	174,047	172,414
Other nonfederal	28,768	26,720	26,703	27,640	26,759	26,908	25,717	26,585
Domestic	25,716	23,936	24,171	25,017	23,901	24,041	21,962	22,666
Foreign	3,052	2,784	2,532	2,623	2,858	2,867	3,755	3,919
Self-support	116,342	119,485	121,226	127,741	134,541	136,738	145,620	149,613
Science and engineering	320,469	322,655	323,371	331,382	342,430	350,133	362,344	376,569
Federal	71,809	73,436	73,700	73,692	71,927	73,048	70,383	74,728
DOD	8,878	8,639	8,601	8,465	8,475	8,497	7,864	8,411
DOE	4,007	4,114	4,370	4,442	4,241	4,246	4,311	4,587
HHS	22,170	23,650	23,881	24,331	23,621	24,461	23,947	24,682
NIH	20,372	22,319	22,731	23,286	22,602	23,425	22,829	23,521
Other HHS	1,798	1,331	1,150	1,045	1,019	1,036	1,118	1,161
NASA	3,175	2,875	2,652	2,338	2,301	2,305	2,320	2,415
NSF	19,066	19,690	20,049	19,972	19,446	19,515	19,599	21,433
USDA	3,387	3,468	3,252	2,896	2,715	2,715	2,691	2,616
Other	11,126	11,000	10,895	11,248	11,128	11,309	9,651	10,584
Institutional	135,251	137,071	137,828	141,069	146,694	150,326	159,833	159,636
Other nonfederal	26,099	24,155	24,089	24,598	23,859	24,108	23,440	24,146
Domestic	23,371	21,615	21,748	22,156	21,248	21,483	19,933	20,519
Foreign	2,728	2,540	2,341	2,442	2,611	2,625	3,507	3,627
Self-support	87,310	87,993	87,754	92,023	99,950	102,651	108,688	118,059
Science	232,930	238,039	241,130	246,248	252,596	259,222	267,267	275,074
Federal	50,441	52,246	52,535	52,441	51,020	51,974	49,682	51,903
DOD	3,396	3,340	3,275	3,134	3,206	3,185	3,100	3,193
DOE	2,291	2,357	2,456	2,508	2,484	2,482	2,475	2,523
HHS	20,223	21,517	21,627	21,850	21,002	21,835	21,165	21,731
NIH	18,736	20,412	20,663	20,940	20,138	20,954	20,180	20,758
Other HHS	1,487	1,105	964	910	864	881	985	973
NASA	1,552	1,451	1,382	1,292	1,302	1,298	1,304	1,295
NSF	12,384	12,943	13,211	13,065	12,818	12,791	12,761	13,808
USDA	2,968	3,060	2,919	2,564	2,411	2,415	2,392	2,333
Other	7,627	7,578	7,665	8,028	7,797	7,968	6,485	7,020
Institutional	104,472	106,522	108,539	110,816	114,596	117,932	125,045	124,895
Other nonfederal	14,997	14,375	14,379	14,889	14,488	14,636	13,910	14,057
Domestic	13,188	12,719	12,882	13,283	12,921	13,075	11,866	11,909
Foreign	1,809	1,656	1,497	1,606	1,567	1,561	2,044	2,148
Self-support	63,020	64,896	65,677	68,102	72,492	74,680	78,630	84,219
Agricultural sciences	9,537	9,509	9,185	8,977	9,103	9,276	9,564	10,246
Federal	2,490	2,496	2,319	2,259	2,241	2,293	2,010	2,170
DOD	33	24	24	25	58	57	26	23
DOE	58	49	53	42	53	53	38	58
HHS	89	90	84	78	74	74	68	69
NIH	60	67	74	67	52	52	61	52
Other HHS	29	23	10	11	22	22	7	17

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
NASA	90	52	49	42	41	47	39	41
NSF	211	202	211	216	257	257	222	265
USDA	1,333	1,369	1,277	1,169	1,029	1,081	1,064	1,108
Other	676	710	621	687	729	724	553	606
Institutional	3,857	3,926	3,888	3,993	4,169	4,320	4,716	4,606
Other nonfederal	1,561	1,571	1,455	1,286	1,219	1,238	1,259	1,323
Domestic	1,390	1,443	1,351	1,208	1,161	1,175	1,128	1,237
Foreign	171	128	104	78	58	63	131	86
Self-support	1,629	1,516	1,523	1,439	1,474	1,425	1,579	2,147
Biological sciences	52,563	54,139	55,836	57,082	58,011	58,327	58,501	59,235
Federal	20,081	21,624	21,967	22,091	20,925	20,868	19,841	20,420
DOD	349	430	346	360	360	356	398	402
DOE	193	224	253	213	178	177	176	198
HHS	14,855	16,100	16,167	16,595	15,717	15,726	15,082	15,504
NIH	14,130	15,585	15,648	16,086	15,303	15,322	14,624	15,109
Other HHS	725	515	519	509	414	404	458	395
NASA	98	105	94	81	65	67	51	54
NSF	2,128	2,255	2,292	2,204	2,118	2,119	2,123	2,279
USDA	1,032	1,072	1,071	904	901	841	791	769
Other	1,426	1,438	1,744	1,734	1,586	1,582	1,220	1,214
Institutional	21,654	21,736	22,760	23,134	24,465	24,355	25,173	24,818
Other nonfederal	3,960	3,766	3,939	4,207	4,086	4,058	3,892	3,863
Domestic	3,673	3,522	3,681	3,918	3,816	3,792	3,515	3,401
Foreign	287	244	258	289	270	266	377	462
Self-support	6,868	7,013	7,170	7,650	8,535	9,046	9,595	10,134
Communication ^a	ne	ne	ne	ne	ne	4,049	4,642	5,429
Federal	ne	ne	ne	ne	ne	116	91	119
DOD	ne	ne	ne	ne	ne	8	8	19
DOE	ne	ne	ne	ne	ne	0	0	1
HHS	ne	ne	ne	ne	ne	23	28	27
NIH	ne	ne	ne	ne	ne	19	24	20
Other HHS	ne	ne	ne	ne	ne	4	4	7
NASA	ne	ne	ne	ne	ne	0	0	0
NSF	ne	ne	ne	ne	ne	14	19	40
USDA	ne	ne	ne	ne	ne	7	5	5
Other	ne	ne	ne	ne	ne	64	31	27
Institutional	ne	ne	ne	ne	ne	2,303	2,725	2,921
Other nonfederal	ne	ne	ne	ne	ne	209	303	301
Domestic	ne	ne	ne	ne	ne	185	293	289
Foreign	ne	ne	ne	ne	ne	24	10	12
Self-support	ne	ne	ne	ne	ne	1,421	1,523	2,088
Computer sciences	28,284	27,204	26,524	26,937	28,285	27,874	28,850	29,669
Federal	5,278	5,100	5,326	5,008	5,135	5,060	4,920	5,236
DOD	1,378	1,182	1,403	1,196	1,243	1,220	1,201	1,216
DOE	159	155	156	164	176	178	141	143
HHS	300	294	327	310	358	357	367	341
NIH	228	261	289	268	331	329	324	307
Other HHS	72	33	38	42	27	28	43	34
NASA	217	141	95	85	102	102	82	74
NSF	2,706	2,739	2,810	2,708	2,744	2,693	2,630	2,874
USDA	39	37	21	32	28	29	10	11
Other	479	552	514	513	484	481	489	577
Institutional	8,725	8,574	8,530	8,528	8,740	8,648	9,451	9,574
Other nonfederal	1,917	1,698	1,632	1,625	1,495	1,360	1,288	1,430
Domestic	1,727	1,519	1,453	1,421	1,295	1,181	1,070	1,172
Foreign	190	179	179	204	200	179	218	258

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Self-support	12,364	11,832	11,036	11,776	12,915	12,806	13,191	13,429
Earth, atmospheric, and ocean sciences	11,076	11,265	10,999	11,102	10,973	10,570	10,874	11,211
Federal	3,275	3,309	3,277	3,285	3,275	3,161	3,090	3,078
DOD	254	128	153	131	116	111	114	99
DOE	154	170	166	117	148	145	148	145
HHS	68	42	29	64	26	26	30	36
NIH	52	25	17	55	25	25	22	24
Other HHS	16	17	12	9	1	1	8	12
NASA	419	456	457	417	429	417	433	444
NSF	1,363	1,497	1,493	1,537	1,496	1,445	1,445	1,459
USDA	85	92	73	70	79	67	71	50
Other	932	924	906	949	981	950	849	845
Institutional	4,903	5,043	4,842	4,787	4,811	4,603	4,898	5,039
Other nonfederal	871	864	941	1,059	885	858	912	926
Domestic	755	792	845	980	788	768	769	775
Foreign	116	72	96	79	97	90	143	151
Self-support	2,027	2,049	1,939	1,971	2,002	1,948	1,974	2,168
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	1,489	1,754	1,903
Federal	ne	ne	ne	ne	ne	91	99	111
DOD	ne	ne	ne	ne	ne	3	6	7
DOE	ne	ne	ne	ne	ne	0	0	0
HHS	ne	ne	ne	ne	ne	47	38	49
NIH	ne	ne	ne	ne	ne	31	28	40
Other HHS	ne	ne	ne	ne	ne	16	10	9
NASA	ne	ne	ne	ne	ne	0	0	0
NSF	ne	ne	ne	ne	ne	9	9	13
USDA	ne	ne	ne	ne	ne	4	24	11
Other	ne	ne	ne	ne	ne	28	22	31
Institutional	ne	ne	ne	ne	ne	743	951	928
Other nonfederal	ne	ne	ne	ne	ne	78	102	105
Domestic	ne	ne	ne	ne	ne	78	100	103
Foreign	ne	ne	ne	ne	ne	0	2	2
Self-support	ne	ne	ne	ne	ne	577	602	759
Mathematical sciences	13,988	14,357	14,652	14,995	15,311	15,013	15,636	16,328
Federal	1,666	1,690	1,718	1,738	1,691	1,654	1,594	1,869
DOD	228	163	184	175	173	162	169	148
DOE	53	64	69	64	54	53	49	51
HHS	154	174	165	178	189	192	171	205
NIH	119	154	155	152	159	163	155	183
Other HHS	35	20	10	26	30	29	16	22
NASA	22	24	24	18	16	12	13	20
NSF	969	1,018	1,011	1,006	987	963	977	1,139
USDA	9	33	35	19	19	19	15	16
Other	231	214	230	278	253	253	200	290
Institutional	9,444	9,725	9,883	9,910	10,063	9,997	10,606	10,507
Other nonfederal	474	371	425	459	515	503	420	474
Domestic	379	295	342	390	460	455	324	349
Foreign	95	76	83	69	55	48	96	125
Self-support	2,404	2,571	2,626	2,888	3,042	2,859	3,016	3,478
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,076	2,818	3,420
Federal	ne	ne	ne	ne	ne	346	304	351
DOD	ne	ne	ne	ne	ne	24	23	22
DOE	ne	ne	ne	ne	ne	5	8	6
HHS	ne	ne	ne	ne	ne	56	55	75
NIH	ne	ne	ne	ne	ne	49	52	71

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Other HHS	ne	ne	ne	ne	ne	7	3	4
NASA	ne	ne	ne	ne	ne	5	4	3
NSF	ne	ne	ne	ne	ne	134	113	134
USDA	ne	ne	ne	ne	ne	13	7	15
Other	ne	ne	ne	ne	ne	109	94	96
Institutional	ne	ne	ne	ne	ne	807	1,342	1,555
Other nonfederal	ne	ne	ne	ne	ne	80	122	134
Domestic	ne	ne	ne	ne	ne	71	92	93
Foreign	ne	ne	ne	ne	ne	9	30	41
Self-support	ne	ne	ne	ne	ne	843	1,050	1,380
Neuroscience ^a	na	na	na	na	na	1,529	1,908	2,261
Federal	na	na	na	na	na	844	1,045	1,200
DOD	na	na	na	na	na	9	9	33
DOE	na	na	na	na	na	0	1	1
HHS	na	na	na	na	na	785	957	1,072
NIH	na	na	na	na	na	780	948	1,046
Other HHS	na	na	na	na	na	5	9	26
NASA	na	na	na	na	na	0	1	0
NSF	na	na	na	na	na	22	53	75
USDA	na	na	na	na	na	0	0	1
Other	na	na	na	na	na	28	24	18
Institutional	na	na	na	na	na	529	656	838
Other nonfederal	na	na	na	na	na	88	111	139
Domestic	na	na	na	na	na	82	102	127
Foreign	na	na	na	na	na	6	9	12
Self-support	na	na	na	na	na	68	96	84
Physical sciences	30,060	31,267	31,921	32,368	32,548	32,327	32,747	33,671
Federal	10,600	11,145	11,149	11,189	11,222	11,147	10,660	11,045
DOD	885	1,146	892	906	1,002	996	865	904
DOE	1,607	1,613	1,695	1,834	1,795	1,791	1,866	1,894
HHS	2,446	2,531	2,615	2,518	2,560	2,531	2,394	2,362
NIH	2,179	2,356	2,473	2,396	2,403	2,374	2,253	2,210
Other HHS	267	175	142	122	157	157	141	152
NASA	569	556	574	571	583	582	607	573
NSF	3,860	4,072	4,131	4,083	3,901	3,873	3,956	4,176
USDA	65	41	39	24	34	33	67	32
Other	1,168	1,186	1,203	1,253	1,347	1,341	905	1,104
Institutional	15,892	16,508	16,954	17,241	17,288	17,227	18,186	18,236
Other nonfederal	2,063	2,083	2,147	2,178	2,188	2,174	1,971	2,033
Domestic	1,936	1,985	2,054	2,067	1,999	1,985	1,736	1,771
Foreign	127	98	93	111	189	189	235	262
Self-support	1,505	1,531	1,671	1,760	1,850	1,779	1,930	2,357
Psychology	30,345	32,111	32,781	32,944	34,801	34,286	35,866	34,585
Federal	3,454	3,411	3,457	3,354	3,305	3,201	2,897	2,966
DOD	145	135	143	145	130	115	125	138
DOE	10	27	30	32	30	30	6	0
HHS	1,839	1,849	1,845	1,732	1,690	1,641	1,594	1,584
NIH	1,596	1,647	1,703	1,599	1,545	1,501	1,390	1,378
Other HHS	243	202	142	133	145	140	204	206
NASA	21	27	7	8	2	3	6	6
NSF	327	366	393	415	419	380	361	411
USDA	17	20	15	11	6	6	3	6
Other	1,095	987	1,024	1,011	1,028	1,026	802	821
Institutional	12,113	12,426	12,490	12,787	13,643	13,464	13,745	13,215
Other nonfederal	1,252	1,331	1,358	1,505	1,512	1,450	1,215	1,170
Domestic	1,173	1,286	1,328	1,453	1,455	1,399	1,108	1,096

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Foreign	79	45	30	52	57	51	107	74
Self-support	13,526	14,943	15,476	15,298	16,341	16,171	18,009	17,234
Social sciences	57,077	58,187	59,232	61,843	63,564	62,406	64,107	67,116
Federal	3,597	3,471	3,322	3,517	3,226	3,193	3,131	3,338
DOD	124	132	130	196	124	124	156	182
DOE	57	55	34	42	50	50	42	26
HHS	472	437	395	375	388	377	381	407
NIH	372	317	304	317	320	309	299	318
Other HHS	100	120	91	58	68	68	82	89
NASA	116	90	82	70	64	63	68	80
NSF	820	794	870	896	896	882	853	943
USDA	388	396	388	335	315	315	335	309
Other	1,620	1,567	1,423	1,603	1,389	1,382	1,296	1,391
Institutional	27,884	28,584	29,192	30,436	31,417	30,936	32,596	32,658
Other nonfederal	2,899	2,691	2,482	2,570	2,588	2,540	2,315	2,159
Domestic	2,155	1,877	1,828	1,846	1,947	1,904	1,629	1,496
Foreign	744	814	654	724	641	636	686	663
Self-support	22,697	23,441	24,236	25,320	26,333	25,737	26,065	28,961
Engineering	87,539	84,616	82,241	85,134	89,834	90,911	95,077	101,495
Federal	21,368	21,190	21,165	21,251	20,907	21,074	20,701	22,825
DOD	5,482	5,299	5,326	5,331	5,269	5,312	4,764	5,218
DOE	1,716	1,757	1,914	1,934	1,757	1,764	1,836	2,064
HHS	1,947	2,133	2,254	2,481	2,619	2,626	2,782	2,951
NIH	1,636	1,907	2,068	2,346	2,464	2,471	2,649	2,763
Other HHS	311	226	186	135	155	155	133	188
NASA	1,623	1,424	1,270	1,046	999	1,007	1,016	1,120
NSF	6,682	6,747	6,838	6,907	6,628	6,724	6,838	7,625
USDA	419	408	333	332	304	300	299	283
Other	3,499	3,422	3,230	3,220	3,331	3,341	3,166	3,564
Institutional	30,779	30,549	29,289	30,253	32,098	32,394	34,788	34,741
Other nonfederal	11,102	9,780	9,710	9,709	9,371	9,472	9,530	10,089
Domestic	10,183	8,896	8,866	8,873	8,327	8,408	8,067	8,610
Foreign	919	884	844	836	1,044	1,064	1,463	1,479
Self-support	24,290	23,097	22,077	23,921	27,458	27,971	30,058	33,840
Aerospace engineering	3,206	3,190	3,150	3,291	3,379	3,379	3,588	3,845
Federal	1,196	1,214	1,215	1,157	1,135	1,135	1,236	1,346
DOD	471	537	557	540	482	482	509	588
DOE	44	50	42	42	47	47	47	43
HHS	10	12	16	17	19	19	12	13
NIH	8	10	15	15	15	15	11	13
Other HHS	2	2	1	2	4	4	1	0
NASA	462	423	382	318	336	336	382	434
NSF	121	116	135	139	131	131	140	143
USDA	1	0	1	1	0	0	0	0
Other	87	76	82	100	120	120	146	125
Institutional	1,044	909	946	950	1,040	1,040	1,218	1,152
Other nonfederal	296	364	281	395	479	479	265	334
Domestic	253	298	244	347	382	382	190	253
Foreign	43	66	37	48	97	97	75	81
Self-support	670	703	708	789	725	725	869	1,013
Agricultural engineering	900	842	855	893	917	917	1,022	1,084
Federal	277	239	253	268	245	245	279	298
DOD	13	9	13	15	8	8	17	33
DOE	8	0	6	9	10	10	12	26
HHS	12	14	10	7	8	8	10	12

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
NIH	9	3	7	4	8	8	9	9
Other HHS	3	11	3	3	0	0	1	3
NASA	15	14	7	16	9	9	4	5
NSF	20	25	25	21	30	30	33	39
USDA	160	136	121	149	113	113	119	116
Other	49	41	71	51	67	67	84	67
Institutional	369	357	377	400	451	451	492	466
Other nonfederal	117	135	126	106	126	126	129	148
Domestic	99	122	113	97	112	112	96	129
Foreign	18	13	13	9	14	14	33	19
Self-support	137	111	99	119	95	95	122	172
Architecture ^a	na	na	na	na	na	3,981	5,092	5,988
Federal	na	na	na	na	na	38	41	104
DOD	na	na	na	na	na	9	5	4
DOE	na	na	na	na	na	2	5	4
HHS	na	na	na	na	na	0	3	3
NIH	na	na	na	na	na	0	2	2
Other HHS	na	na	na	na	na	0	1	1
NASA	na	na	na	na	na	0	0	0
NSF	na	na	na	na	na	6	7	12
USDA	na	na	na	na	na	1	3	1
Other	na	na	na	na	na	20	18	80
Institutional	na	na	na	na	na	1,545	1,955	1,957
Other nonfederal	na	na	na	na	na	173	163	301
Domestic	na	na	na	na	na	150	134	265
Foreign	na	na	na	na	na	23	29	36
Self-support	na	na	na	na	na	2,225	2,933	3,626
Biomedical engineering	4,691	5,015	5,232	5,641	5,885	5,908	6,260	6,840
Federal	1,439	1,527	1,639	1,807	2,089	2,100	2,230	2,447
DOD	71	88	87	99	93	93	122	157
DOE	13	9	18	25	26	26	42	50
HHS	896	1,002	1,137	1,245	1,412	1,423	1,542	1,618
NIH	861	991	1,122	1,234	1,389	1,400	1,500	1,589
Other HHS	35	11	15	11	23	23	42	29
NASA	37	42	32	10	15	15	14	15
NSF	232	248	252	280	306	306	352	417
USDA	1	6	5	5	6	6	5	6
Other	189	132	108	143	231	231	153	184
Institutional	1,325	1,550	1,649	1,828	1,933	1,945	2,175	2,270
Other nonfederal	844	719	676	636	527	527	633	688
Domestic	822	690	645	621	509	509	572	620
Foreign	22	29	31	15	18	18	61	68
Self-support	1,083	1,219	1,268	1,370	1,336	1,336	1,222	1,435
Chemical engineering	6,373	6,346	6,110	6,185	6,249	6,433	6,722	7,058
Federal	2,055	2,146	2,097	2,104	1,985	2,039	2,044	2,121
DOD	265	218	204	179	164	173	162	187
DOE	327	352	365	371	352	353	374	373
HHS	245	298	274	328	282	294	302	304
NIH	210	262	236	298	248	260	267	263
Other HHS	35	36	38	30	34	34	35	41
NASA	103	95	90	67	52	52	30	31
NSF	841	873	851	816	814	848	860	913
USDA	35	46	46	61	62	62	60	54
Other	239	264	267	282	259	257	256	259
Institutional	2,530	2,463	2,338	2,336	2,501	2,586	2,759	2,907
Other nonfederal	994	957	906	988	970	1,021	1,007	1,038

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Domestic	931	902	864	927	811	859	861	885
Foreign	63	55	42	61	159	162	146	153
Self-support	794	780	769	757	793	787	912	992
Civil engineering ^a	13,443	13,348	12,958	12,836	14,352	11,063	11,619	13,120
Federal	2,168	2,150	1,997	1,870	1,888	1,869	1,726	1,978
DOD	148	169	180	143	205	200	189	193
DOE	94	90	92	64	73	71	73	108
HHS	57	59	60	56	47	47	38	53
NIH	41	33	32	30	39	39	33	34
Other HHS	16	26	28	26	8	8	5	19
NASA	87	59	68	57	59	65	75	98
NSF	700	702	652	658	653	649	545	637
USDA	69	73	64	40	52	47	45	44
Other	1,013	998	881	852	799	790	761	845
Institutional	5,520	5,672	5,303	5,345	6,008	4,707	5,257	5,458
Other nonfederal	1,479	1,239	1,165	1,173	1,145	1,003	1,012	1,024
Domestic	1,376	1,107	1,054	1,079	1,024	897	837	863
Foreign	103	132	111	94	121	106	175	161
Self-support	4,276	4,287	4,493	4,448	5,311	3,484	3,624	4,660
Electrical engineering	27,680	25,783	25,002	26,259	27,522	27,646	27,813	27,792
Federal	6,159	5,964	6,021	5,975	5,809	5,866	5,888	6,248
DOD	2,233	1,966	1,946	1,937	1,906	1,923	1,969	2,046
DOE	189	211	236	244	213	212	186	226
HHS	356	351	360	421	402	402	418	429
NIH	246	291	314	394	378	379	394	397
Other HHS	110	60	46	27	24	23	24	32
NASA	368	333	242	215	215	215	203	204
NSF	2,233	2,336	2,488	2,481	2,347	2,389	2,492	2,707
USDA	57	54	23	21	22	20	14	11
Other	723	713	726	656	704	705	606	625
Institutional	8,790	8,438	8,221	8,485	8,826	8,841	8,887	8,591
Other nonfederal	3,296	2,776	3,038	2,634	2,539	2,571	2,508	2,483
Domestic	3,066	2,612	2,784	2,434	2,367	2,395	2,234	2,223
Foreign	230	164	254	200	172	176	274	260
Self-support	9,435	8,605	7,722	9,165	10,348	10,368	10,530	10,470
Engineering science	1,751	1,712	1,589	1,639	1,437	1,402	1,444	1,450
Federal	616	556	593	581	434	424	453	471
DOD	265	166	164	126	96	96	95	95
DOE	62	65	78	100	77	77	84	109
HHS	32	42	55	58	48	48	51	33
NIH	24	37	46	56	44	44	51	30
Other HHS	8	5	9	2	4	4	0	3
NASA	29	22	20	24	13	13	15	19
NSF	165	207	234	230	166	155	167	178
USDA	13	14	1	1	3	3	5	2
Other	50	40	41	42	31	32	36	35
Institutional	669	753	634	617	615	590	542	548
Other nonfederal	160	176	177	175	103	104	109	125
Domestic	138	157	159	158	95	96	85	105
Foreign	22	19	18	17	8	8	24	20
Self-support	306	227	185	266	285	284	340	306
Industrial engineering	6,879	6,352	5,822	6,171	6,727	7,109	7,852	7,878
Federal	976	957	934	887	769	820	871	996
DOD	251	299	336	316	249	268	250	326
DOE	58	45	46	46	32	34	73	55

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
HHS	73	66	68	65	81	81	78	103
NIH	36	43	56	54	53	52	68	80
Other HHS	37	23	12	11	28	29	10	23
NASA	54	42	48	20	23	28	23	29
NSF	378	328	285	278	249	275	289	309
USDA	11	12	9	9	8	8	7	11
Other	151	165	142	153	127	126	151	163
Institutional	2,312	2,284	2,084	2,255	2,221	2,268	2,567	2,335
Other nonfederal	693	592	553	536	506	572	672	647
Domestic	615	512	495	465	407	434	561	518
Foreign	78	80	58	71	99	138	111	129
Self-support	2,898	2,519	2,251	2,493	3,231	3,449	3,742	3,900
Mechanical engineering	13,119	12,478	11,984	12,408	12,913	12,903	13,456	15,215
Federal	3,401	3,157	3,092	3,228	3,179	3,175	3,167	3,619
DOD	876	730	700	777	849	847	852	965
DOE	351	360	342	391	331	331	371	386
HHS	161	179	186	187	190	190	193	221
NIH	130	154	159	171	168	168	183	199
Other HHS	31	25	27	16	22	22	10	22
NASA	342	282	258	217	189	189	193	213
NSF	1,101	1,036	1,053	1,091	1,076	1,074	1,068	1,255
USDA	20	22	19	11	17	17	15	16
Other	550	548	534	554	527	527	475	563
Institutional	4,983	4,918	4,614	4,816	4,995	4,999	5,215	5,539
Other nonfederal	1,725	1,474	1,383	1,515	1,471	1,459	1,479	1,706
Domestic	1,595	1,322	1,255	1,361	1,314	1,303	1,197	1,435
Foreign	130	152	128	154	157	156	282	271
Self-support	3,010	2,929	2,895	2,849	3,268	3,270	3,595	4,351
Metallurgical/materials engineering	4,375	4,338	4,491	4,606	4,647	4,593	4,784	5,166
Federal	1,670	1,590	1,587	1,628	1,601	1,618	1,690	2,020
DOD	474	376	364	369	401	404	388	398
DOE	263	270	319	318	254	261	287	346
HHS	38	50	36	58	64	58	75	85
NIH	29	43	31	57	62	56	75	82
Other HHS	9	7	5	1	2	2	0	3
NASA	62	52	58	52	30	30	33	32
NSF	650	657	639	661	606	615	645	768
USDA	3	4	7	6	5	5	11	16
Other	180	181	164	164	241	245	251	375
Institutional	1,381	1,511	1,604	1,581	1,675	1,621	1,695	1,646
Other nonfederal	820	730	775	815	793	768	761	622
Domestic	740	657	705	755	708	685	633	497
Foreign	80	73	70	60	85	83	128	125
Self-support	504	507	525	582	578	586	638	878
Mining engineering	208	229	200	177	199	132	201	205
Federal	60	49	36	28	37	26	23	31
DOD	2	0	1	1	3	0	0	0
DOE	26	18	17	14	10	10	12	6
HHS	15	13	1	1	5	7	4	14
NIH	0	1	0	1	3	5	3	10
Other HHS	15	12	1	0	2	2	1	4
NASA	0	0	2	0	0	0	0	0
NSF	7	7	4	2	5	0	1	4
USDA	0	2	1	1	0	0	0	0
Other	10	9	10	9	14	9	6	7
Institutional	82	105	102	87	83	67	70	60

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Other nonfederal	17	18	15	12	23	20	68	72
Domestic	16	16	13	11	23	20	68	72
Foreign	1	2	2	1	0	0	0	0
Self-support	49	57	47	50	56	19	40	42
Nuclear engineering	752	809	840	910	960	951	941	968
Federal	339	336	368	338	328	326	335	403
DOD	43	48	48	48	35	35	46	60
DOE	192	197	231	208	212	212	182	208
HHS	5	12	12	8	11	9	9	10
NIH	1	6	12	8	10	8	9	10
Other HHS	4	6	0	0	1	1	0	0
NASA	15	13	10	9	16	16	7	10
NSF	9	7	10	5	19	19	17	18
USDA	1	0	0	0	0	0	0	0
Other	74	59	57	60	35	35	74	97
Institutional	186	272	234	337	376	370	345	268
Other nonfederal	102	102	112	102	113	113	127	164
Domestic	89	99	100	89	101	101	100	153
Foreign	13	3	12	13	12	12	27	11
Self-support	125	99	126	133	143	142	134	133
Petroleum engineering	682	658	629	642	786	786	822	988
Federal	65	58	97	64	100	100	28	37
DOD	0	2	0	1	0	0	0	0
DOE	53	47	86	51	73	73	15	28
HHS	1	1	0	0	1	1	0	0
NIH	0	0	0	0	0	0	0	0
Other HHS	1	1	0	0	1	1	0	0
NASA	0	0	2	0	7	7	0	0
NSF	2	3	4	5	9	9	3	2
USDA	1	1	3	1	0	0	1	1
Other	8	4	2	6	10	10	9	6
Institutional	263	302	178	203	247	247	258	312
Other nonfederal	176	142	224	248	275	275	349	423
Domestic	94	78	185	192	215	215	282	320
Foreign	82	64	39	56	60	60	67	103
Self-support	178	156	130	127	164	164	187	216
Engineering, nec	3,480	3,516	3,379	3,476	3,861	3,708	3,461	3,898
Federal	947	1,247	1,236	1,316	1,308	1,293	690	706
DOD	370	691	726	780	778	774	160	166
DOE	36	43	36	51	47	45	73	96
HHS	46	34	39	30	49	39	47	53
NIH	41	33	38	24	47	37	44	45
Other HHS	5	1	1	6	2	2	3	8
NASA	49	47	51	41	35	32	37	30
NSF	223	202	206	240	217	218	219	223
USDA	47	38	33	26	16	18	14	5
Other	176	192	145	148	166	167	140	133
Institutional	1,325	1,015	1,005	1,013	1,127	1,117	1,353	1,232
Other nonfederal	383	356	279	374	301	261	248	314
Domestic	349	324	250	337	259	250	217	272
Foreign	34	32	29	37	42	11	31	42
Self-support	825	898	859	773	1,125	1,037	1,170	1,646
Health ^a	51,897	55,329	57,827	61,756	61,292	59,288	59,943	52,287
Federal	8,998	9,161	8,628	9,209	8,476	7,643	6,520	5,516
DOD	292	328	347	361	334	323	316	238

TABLE 60. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary source of support: 2003–09

Field and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
DOE	13	16	16	27	36	34	24	14
HHS	6,740	6,963	6,608	6,697	6,231	5,443	4,407	3,956
NIH	3,866	4,298	4,067	4,257	4,283	3,493	3,084	2,933
Other HHS	2,874	2,665	2,541	2,440	1,948	1,950	1,323	1,023
NASA	13	25	20	14	8	7	8	3
NSF	148	169	208	283	222	198	206	169
USDA	78	84	87	98	75	89	68	81
Other	1,714	1,576	1,342	1,729	1,570	1,549	1,491	1,055
Institutional	11,198	12,111	13,113	13,787	15,325	14,758	14,214	12,778
Other nonfederal	2,669	2,565	2,614	3,042	2,900	2,800	2,277	2,439
Domestic	2,345	2,321	2,423	2,861	2,653	2,558	2,029	2,147
Foreign	324	244	191	181	247	242	248	292
Self-support	29,032	31,492	33,472	35,718	34,591	34,087	36,932	31,554

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; nec = not elsewhere classified; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 61. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by sex, primary source of support, and field: 2009

Sex and primary source of support	All science, engineering, and health	Science and engineering			Health		
		Total	Science	Engineering	Total	Clinical medicine	Other health
Both sexes, all sources	428,856	376,569	275,074	101,495	52,287	16,018	36,269
Federal	80,244	74,728	51,903	22,825	5,516	2,271	3,245
DOD	8,649	8,411	3,193	5,218	238	98	140
DOE	4,601	4,587	2,523	2,064	14	9	5
HHS	28,638	24,682	21,731	2,951	3,956	1,791	2,165
NIH	26,454	23,521	20,758	2,763	2,933	1,416	1,517
Other HHS	2,184	1,161	973	188	1,023	375	648
NASA	2,418	2,415	1,295	1,120	3	0	3
NSF	21,602	21,433	13,808	7,625	169	67	102
USDA	2,697	2,616	2,333	283	81	10	71
Other	11,639	10,584	7,020	3,564	1,055	296	759
Institutional	172,414	159,636	124,895	34,741	12,778	3,698	9,080
Other nonfederal	26,585	24,146	14,057	10,089	2,439	622	1,817
Domestic	22,666	20,519	11,909	8,610	2,147	522	1,625
Foreign	3,919	3,627	2,148	1,479	292	100	192
Self-support	149,613	118,059	84,219	33,840	31,554	9,427	22,127
Male, all sources	229,647	215,949	139,147	76,802	13,698	5,133	8,565
Federal	47,846	45,912	28,526	17,386	1,934	912	1,022
DOD	6,782	6,643	2,334	4,309	139	53	86
DOE	3,506	3,497	1,872	1,625	9	6	3
HHS	13,318	11,909	9,904	2,005	1,409	728	681
NIH	12,558	11,365	9,487	1,878	1,193	615	578
Other HHS	760	544	417	127	216	113	103
NASA	1,748	1,747	827	920	1	0	1
NSF	14,486	14,404	8,741	5,663	82	28	54
USDA	1,396	1,365	1,171	194	31	1	30
Other	6,610	6,347	3,677	2,670	263	96	167
Institutional	94,565	90,506	64,572	25,934	4,059	1,340	2,719
Other nonfederal	16,191	15,399	7,570	7,829	792	239	553
Domestic	13,589	12,926	6,245	6,681	663	194	469
Foreign	2,602	2,473	1,325	1,148	129	45	84
Self-support	71,045	64,132	38,479	25,653	6,913	2,642	4,271
Female, all sources	199,209	160,620	135,927	24,693	38,589	10,885	27,704
Federal	32,398	28,816	23,377	5,439	3,582	1,359	2,223
DOD	1,867	1,768	859	909	99	45	54
DOE	1,095	1,090	651	439	5	3	2
HHS	15,320	12,773	11,827	946	2,547	1,063	1,484
NIH	13,896	12,156	11,271	885	1,740	801	939
Other HHS	1,424	617	556	61	807	262	545
NASA	670	668	468	200	2	0	2
NSF	7,116	7,029	5,067	1,962	87	39	48
USDA	1,301	1,251	1,162	89	50	9	41
Other	5,029	4,237	3,343	894	792	200	592
Institutional	77,849	69,130	60,323	8,807	8,719	2,358	6,361
Other nonfederal	10,394	8,747	6,487	2,260	1,647	383	1,264
Domestic	9,077	7,593	5,664	1,929	1,484	328	1,156
Foreign	1,317	1,154	823	331	163	55	108
Self-support	78,568	53,927	45,740	8,187	24,641	6,785	17,856

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 62. Full-time graduate students in science fields in doctorate-granting institutions, by sex, primary source of support, and field: 2009

Sex and primary source of support	Total	Agricultural sciences	Biological sciences	Communication	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences	Mathematical sciences	Multidisciplinary/interdisciplinary studies	Neuroscience	Physical sciences	Psychology	Social sciences
Both sexes, all sources	275,074	10,246	59,235	5,429	29,669	11,211	1,903	16,328	3,420	2,261	33,671	34,585	67,116
Federal	51,903	2,170	20,420	119	5,236	3,078	111	1,869	351	1,200	11,045	2,966	3,338
DOD	3,193	23	402	19	1,216	99	7	148	22	33	904	138	182
DOE	2,523	58	198	1	143	145	0	51	6	1	1,894	0	26
HHS	21,731	69	15,504	27	341	36	49	205	75	1,072	2,362	1,584	407
NIH	20,758	52	15,109	20	307	24	40	183	71	1,046	2,210	1,378	318
Other HHS	973	17	395	7	34	12	9	22	4	26	152	206	89
NASA	1,295	41	54	0	74	444	0	20	3	0	573	6	80
NSF	13,808	265	2,279	40	2,874	1,459	13	1,139	134	75	4,176	411	943
USDA	2,333	1,108	769	5	11	50	11	16	15	1	32	6	309
Other	7,020	606	1,214	27	577	845	31	290	96	18	1,104	821	1,391
Institutional	124,895	4,606	24,818	2,921	9,574	5,039	928	10,507	1,555	838	18,236	13,215	32,658
Other nonfederal	14,057	1,323	3,863	301	1,430	926	105	474	134	139	2,033	1,170	2,159
Domestic	11,909	1,237	3,401	289	1,172	775	103	349	93	127	1,771	1,096	1,496
Foreign	2,148	86	462	12	258	151	2	125	41	12	262	74	663
Self-support	84,219	2,147	10,134	2,088	13,429	2,168	759	3,478	1,380	84	2,357	17,234	28,961
Male, all sources	139,147	5,170	26,055	2,012	22,440	6,040	326	10,869	1,514	1,045	22,675	8,926	32,075
Federal	28,526	1,148	9,191	49	4,306	1,672	13	1,281	193	572	7,538	892	1,671
DOD	2,334	15	179	15	1,053	61	1	111	17	24	674	56	128
DOE	1,872	31	108	1	123	94	0	34	5	0	1,468	0	8
HHS	9,904	30	6,971	6	255	14	4	123	33	504	1,337	453	174
NIH	9,487	21	6,794	4	227	9	3	114	31	496	1,244	409	135
Other HHS	417	9	177	2	28	5	1	9	2	8	93	44	39
NASA	827	25	26	0	61	254	0	14	3	0	398	2	44
NSF	8,741	123	1,037	15	2,355	777	3	800	80	33	2,910	141	467
USDA	1,171	598	325	2	7	29	3	6	9	1	16	0	175
Other	3,677	326	545	10	452	443	2	193	46	10	735	240	675
Institutional	64,572	2,237	10,969	1,096	7,228	2,725	166	7,148	661	381	12,207	3,818	15,936
Other nonfederal	7,570	715	1,741	150	1,127	548	16	314	67	61	1,378	314	1,139
Domestic	6,245	669	1,496	144	934	458	16	223	50	55	1,194	280	726
Foreign	1,325	46	245	6	193	90	0	91	17	6	184	34	413
Self-support	38,479	1,070	4,154	717	9,779	1,095	131	2,126	593	31	1,552	3,902	13,329
Female, all sources	135,927	5,076	33,180	3,417	7,229	5,171	1,577	5,459	1,906	1,216	10,996	25,659	35,041
Federal	23,377	1,022	11,229	70	930	1,406	98	588	158	628	3,507	2,074	1,667
DOD	859	8	223	4	163	38	6	37	5	9	230	82	54
DOE	651	27	90	0	20	51	0	17	1	1	426	0	18
HHS	11,827	39	8,533	21	86	22	45	82	42	568	1,025	1,131	233
NIH	11,271	31	8,315	16	80	15	37	69	40	550	966	969	183
Other HHS	556	8	218	5	6	7	8	13	2	18	59	162	50
NASA	468	16	28	0	13	190	0	6	0	0	175	4	36
NSF	5,067	142	1,242	25	519	682	10	339	54	42	1,266	270	476

TABLE 62. Full-time graduate students in science fields in doctorate-granting institutions, by sex, primary source of support, and field: 2009

Sex and primary source of support	Total	Agricultural sciences	Biological sciences	Communication	Computer sciences	Earth, atmospheric, and ocean sciences	Family and consumer sciences/human sciences	Mathematical sciences	Multidisciplinary/interdisciplinary studies	Neuroscience	Physical sciences	Psychology	Social sciences
USDA	1,162	510	444	3	4	21	8	10	6	0	16	6	134
Other	3,343	280	669	17	125	402	29	97	50	8	369	581	716
Institutional	60,323	2,369	13,849	1,825	2,346	2,314	762	3,359	894	457	6,029	9,397	16,722
Other nonfederal	6,487	608	2,122	151	303	378	89	160	67	78	655	856	1,020
Domestic	5,664	568	1,905	145	238	317	87	126	43	72	577	816	770
Foreign	823	40	217	6	65	61	2	34	24	6	78	40	250
Self-support	45,740	1,077	5,980	1,371	3,650	1,073	628	1,352	787	53	805	13,332	15,632

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 63. Full-time graduate students in engineering fields in doctorate-granting institutions, by sex, primary source of support, and field: 2009

Sex and primary source of support	Total	Aerospace	Agricultural	Biomedical	Chemical	Civil	Electrical	Engineering	Industrial	Mechanical	Metal-lurgical/materials	Mining	Nuclear	Petroleum	Engineering, nec
		engineering	engineering	Architecture	engineering	engineering	engineering	science	engineering	engineering	engineering	engineering	engineering	engineering	engineering
Both sexes, all sources	101,495	3,845	1,084	5,988	6,840	7,058	13,120	27,792	1,450	7,878	15,215	5,166	205	968	988
Federal	22,825	1,346	298	104	2,447	2,121	1,978	6,248	471	996	3,619	2,020	31	403	37
DOD	5,218	588	33	4	157	187	193	2,046	95	326	965	398	0	60	0
DOE	2,064	43	26	4	50	373	108	226	109	55	386	346	6	208	28
HHS	2,951	13	12	3	1,618	304	53	429	33	103	221	85	14	10	0
NIH	2,763	13	9	2	1,589	263	34	397	30	80	199	82	10	0	45
Other HHS	188	0	3	1	29	41	19	32	3	23	22	3	4	0	8
NASA	1,120	434	5	0	15	31	98	204	19	29	213	32	0	10	0
NSF	7,625	143	39	12	417	913	637	2,707	178	309	1,255	768	4	18	2
USDA	283	0	116	1	6	54	44	11	2	11	16	16	0	0	5
Other	3,564	125	67	80	184	259	845	625	35	163	563	375	7	97	6
Institutional	34,741	1,152	466	1,957	2,270	2,907	5,458	8,591	548	2,335	5,539	1,646	60	268	312
Other nonfederal	10,089	334	148	301	688	1,038	1,024	2,483	125	647	1,706	622	72	164	423
Domestic	8,610	253	129	265	620	885	863	2,223	105	518	1,435	497	72	153	320
Foreign	1,479	81	19	36	68	153	161	260	20	129	271	125	0	11	103
Self-support	33,840	1,013	172	3,626	1,435	992	4,660	10,470	306	3,900	4,351	878	42	133	216
Male, all sources	76,802	3,314	717	3,371	4,255	4,760	9,222	22,710	1,125	5,856	12,977	3,759	165	816	815
Federal	17,386	1,172	197	57	1,544	1,414	1,343	5,174	365	735	3,004	1,470	26	346	29
DOD	4,309	527	22	3	104	131	135	1,734	81	265	833	294	0	52	0
DOE	1,625	39	13	4	35	284	67	190	84	45	332	252	5	178	22
HHS	2,005	11	9	2	1,047	177	29	338	26	71	181	58	12	7	0
NIH	1,878	11	6	1	1,029	153	18	316	25	55	163	56	8	7	0
Other HHS	127	0	3	1	18	24	11	22	1	16	18	2	4	0	7
NASA	920	375	4	0	9	22	70	161	14	24	179	26	0	10	0
NSF	5,663	115	18	5	229	596	422	2,222	131	218	988	552	4	16	1
USDA	194	0	84	0	3	40	26	5	1	9	12	11	0	0	3
Other	2,670	105	47	43	117	164	594	524	28	103	479	277	5	83	6
Institutional	25,934	973	308	1,088	1,393	1,950	3,865	6,980	415	1,662	4,722	1,173	52	223	230
Other nonfederal	7,829	286	91	165	440	730	765	2,068	102	480	1,462	457	49	138	363
Domestic	6,681	217	81	146	393	613	640	1,863	86	387	1,232	369	49	127	275
Foreign	1,148	69	10	19	47	117	125	205	16	93	230	88	0	11	88
Self-support	25,653	883	121	2,061	878	666	3,249	8,488	243	2,979	3,789	659	38	109	193
Female, all sources	24,693	531	367	2,617	2,585	2,298	3,898	5,082	325	2,022	2,238	1,407	40	152	173
Federal	5,439	174	101	47	903	707	635	1,074	106	261	615	550	5	57	8
DOD	909	61	11	1	53	56	58	312	14	61	132	104	0	8	0
DOE	439	4	13	0	15	89	41	36	25	10	54	94	1	30	6
HHS	946	2	3	1	571	127	24	91	7	32	40	27	2	3	0
NIH	885	2	3	1	560	110	16	81	5	25	36	26	2	3	0
Other HHS	61	0	0	0	11	17	8	10	2	7	4	1	0	0	1
NASA	200	59	1	0	6	9	28	43	5	5	34	6	0	0	4
NSF	1,962	28	21	7	188	317	215	485	47	91	267	216	0	2	1
															77

TABLE 63. Full-time graduate students in engineering fields in doctorate-granting institutions, by sex, primary source of support, and field: 2009

Sex and primary source of support	Aerospace	Agricultural	Biomedical	Chemical	Civil	Electrical	Engineering	Industrial	Mechanical	Metals-	Mining	Nuclear	Petroleum	Engineering,	
	Total	engineering	engineering	Architecture	engineering	engineering	engineering	science	engineering	engineering	materials	engineering	engineering	nec	
USDA	89	0	32	1	3	14	18	6	1	2	4	5	0	1	2
Other	894	20	20	37	67	95	251	101	7	60	84	98	2	14	0
Institutional	8,807	179	158	869	877	957	1,593	1,611	133	673	817	473	8	45	82
Other nonfederal	2,260	48	57	136	248	308	259	415	23	167	244	165	23	26	60
Domestic	1,929	36	48	119	227	272	223	360	19	131	203	128	23	26	45
Foreign	331	12	9	17	21	36	36	55	4	36	41	37	0	0	15
Self-support	8,187	130	51	1,565	557	326	1,411	1,982	63	921	562	219	4	24	23
															349

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; nec = not elsewhere classified; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 64. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	372,366	377,984	381,198	393,138	403,722	409,421	422,287	428,856
Fellowships	33,933	34,672	36,026	36,332	37,862	38,149	38,363	38,769
Research assistantships	112,426	112,826	112,367	112,825	113,253	114,067	116,310	119,393
Teaching assistantships	71,225	71,286	72,479	74,204	76,038	78,080	81,399	80,028
Traineeships	14,751	14,403	14,217	14,277	13,123	13,180	12,975	12,693
Other types of support	140,031	144,797	146,109	155,500	163,446	165,945	173,240	177,973
Self-support	116,342	119,485	121,226	127,741	134,541	136,738	145,620	149,613
Other	23,689	25,312	24,883	27,759	28,905	29,207	27,620	28,360
Science and engineering	320,469	322,655	323,371	331,382	342,430	350,133	362,344	376,569
Fellowships	31,360	31,879	33,231	33,345	34,430	35,158	35,625	36,158
Research assistantships	105,715	105,791	105,136	105,604	106,018	107,360	109,825	112,936
Teaching assistantships	67,737	67,569	68,588	70,003	71,459	73,762	77,384	76,589
Traineeships	10,072	9,820	9,873	9,724	9,249	9,558	9,882	9,930
Other types of support	105,585	107,596	106,543	112,706	121,274	124,295	129,628	140,956
Self-support	87,310	87,993	87,754	92,023	99,950	102,651	108,688	118,059
Other	18,275	19,603	18,789	20,683	21,324	21,644	20,940	22,897
Science	232,930	238,039	241,130	246,248	252,596	259,222	267,267	275,074
Fellowships	24,137	24,710	26,013	26,194	26,612	27,290	27,651	28,013
Research assistantships	68,527	70,093	70,503	70,556	71,015	72,020	72,654	73,186
Teaching assistantships	55,402	55,572	56,844	57,960	59,063	61,252	64,103	63,655
Traineeships	9,035	8,879	8,856	8,732	8,328	8,637	9,003	9,041
Other types of support	75,829	78,785	78,914	82,806	87,578	90,023	93,856	101,179
Self-support	63,020	64,896	65,677	68,102	72,492	74,680	78,630	84,219
Other	12,809	13,889	13,237	14,704	15,086	15,343	15,226	16,960
Agricultural sciences	9,537	9,509	9,185	8,977	9,103	9,276	9,564	10,246
Fellowships	554	599	656	555	654	678	691	719
Research assistantships	5,766	5,779	5,473	5,319	5,383	5,544	5,528	5,492
Teaching assistantships	1,131	1,154	1,148	1,163	1,172	1,188	1,295	1,353
Traineeships	50	68	20	50	33	33	25	31
Other types of support	2,036	1,909	1,888	1,890	1,861	1,833	2,025	2,651
Self-support	1,629	1,516	1,523	1,439	1,474	1,425	1,579	2,147
Other	407	393	365	451	387	408	446	504
Biological sciences	52,563	54,139	55,836	57,082	58,011	58,327	58,501	59,235
Fellowships	6,437	6,580	7,053	6,760	6,618	6,651	6,743	6,497
Research assistantships	22,477	23,674	24,349	24,783	24,682	24,448	23,890	23,735
Teaching assistantships	8,693	8,457	8,712	9,022	9,349	9,359	9,215	9,231
Traineeships	5,649	5,611	5,710	5,510	5,581	5,615	5,889	5,890
Other types of support	9,307	9,817	10,012	11,007	11,781	12,254	12,764	13,882
Self-support	6,868	7,013	7,170	7,650	8,535	9,046	9,595	10,134
Other	2,439	2,804	2,842	3,357	3,246	3,208	3,169	3,748
Communication ^a	ne	ne	ne	ne	ne	4,049	4,642	5,429
Fellowships	ne	ne	ne	ne	ne	170	216	292
Research assistantships	ne	ne	ne	ne	ne	549	588	582
Teaching assistantships	ne	ne	ne	ne	ne	1,698	2,034	2,111
Traineeships	ne	ne	ne	ne	ne	25	12	19
Other types of support	ne	ne	ne	ne	ne	1,607	1,792	2,425
Self-support	ne	ne	ne	ne	ne	1,421	1,523	2,088
Other	ne	ne	ne	ne	ne	186	269	337
Computer sciences	28,284	27,204	26,524	26,937	28,285	27,874	28,850	29,669
Fellowships	1,326	1,378	1,449	1,463	1,472	1,456	1,672	1,882
Research assistantships	7,332	7,068	7,053	7,084	7,155	6,921	7,225	7,454
Teaching assistantships	4,800	4,615	4,506	4,374	4,484	4,446	4,696	4,563
Traineeships	315	285	230	181	157	157	148	167
Other types of support	14,511	13,858	13,286	13,835	15,017	14,894	15,109	15,603

TABLE 64. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Self-support	12,364	11,832	11,036	11,776	12,915	12,806	13,191	13,429
Other	2,147	2,026	2,250	2,059	2,102	2,088	1,918	2,174
Earth, atmospheric, and ocean sciences	11,076	11,265	10,999	11,102	10,973	10,570	10,874	11,211
Fellowships	1,164	1,222	1,355	1,300	1,267	1,179	1,275	1,259
Research assistantships	4,532	4,713	4,655	4,664	4,601	4,409	4,487	4,628
Teaching assistantships	2,692	2,590	2,560	2,704	2,625	2,568	2,728	2,674
Traineeships	111	119	111	106	70	74	79	67
Other types of support	2,577	2,621	2,318	2,328	2,410	2,340	2,305	2,583
Self-support	2,027	2,049	1,939	1,971	2,002	1,948	1,974	2,168
Other	550	572	379	357	408	392	331	415
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	1,489	1,754	1,903
Fellowships	ne	ne	ne	ne	ne	90	117	133
Research assistantships	ne	ne	ne	ne	ne	334	385	434
Teaching assistantships	ne	ne	ne	ne	ne	429	517	464
Traineeships	ne	ne	ne	ne	ne	9	0	1
Other types of support	ne	ne	ne	ne	ne	627	735	871
Self-support	ne	ne	ne	ne	ne	577	602	759
Other	ne	ne	ne	ne	ne	50	133	112
Mathematical sciences	13,988	14,357	14,652	14,995	15,311	15,013	15,636	16,328
Fellowships	1,374	1,333	1,414	1,529	1,550	1,541	1,573	1,708
Research assistantships	1,768	1,869	1,847	1,765	1,841	1,784	1,821	1,931
Teaching assistantships	7,738	7,874	8,041	8,064	8,226	8,178	8,547	8,494
Traineeships	123	105	95	98	125	128	156	139
Other types of support	2,985	3,176	3,255	3,539	3,569	3,382	3,539	4,056
Self-support	2,404	2,571	2,626	2,888	3,042	2,859	3,016	3,478
Other	581	605	629	651	527	523	523	578
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	2,076	2,818	3,420
Fellowships	ne	ne	ne	ne	ne	261	531	626
Research assistantships	ne	ne	ne	ne	ne	514	527	615
Teaching assistantships	ne	ne	ne	ne	ne	280	406	483
Traineeships	ne	ne	ne	ne	ne	39	46	45
Other types of support	ne	ne	ne	ne	ne	982	1,308	1,651
Self-support	ne	ne	ne	ne	ne	843	1,050	1,380
Other	ne	ne	ne	ne	ne	139	258	271
Neuroscience ^a	na	na	na	na	na	1,529	1,908	2,261
Fellowships	na	na	na	na	na	372	381	462
Research assistantships	na	na	na	na	na	634	832	955
Teaching assistantships	na	na	na	na	na	199	177	198
Traineeships	na	na	na	na	na	211	349	426
Other types of support	na	na	na	na	na	113	169	220
Self-support	na	na	na	na	na	68	96	84
Other	na	na	na	na	na	45	73	136
Physical sciences	30,060	31,267	31,921	32,368	32,548	32,327	32,747	33,671
Fellowships	2,505	2,707	2,760	3,073	3,119	3,106	2,862	2,895
Research assistantships	13,450	13,610	13,921	13,809	13,795	13,676	13,961	14,354
Teaching assistantships	11,661	12,108	12,455	12,449	12,489	12,474	12,939	12,788
Traineeships	364	366	420	436	417	415	390	432
Other types of support	2,080	2,476	2,365	2,601	2,728	2,656	2,595	3,202
Self-support	1,505	1,531	1,671	1,760	1,850	1,779	1,930	2,357
Other	575	945	694	841	878	877	665	845
Psychology	30,345	32,111	32,781	32,944	34,801	34,286	35,866	34,585
Fellowships	2,199	2,317	2,443	2,543	2,307	2,252	2,130	2,027
Research assistantships	5,181	5,540	5,363	5,284	5,592	5,424	5,646	5,251

TABLE 64. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Teaching assistantships	5,808	5,658	5,944	6,259	6,276	6,171	6,381	6,348
Traineeships	1,140	876	1,035	1,032	929	920	913	1,042
Other types of support	16,017	17,720	17,996	17,826	19,697	19,519	20,796	19,917
Self-support	13,526	14,943	15,476	15,298	16,341	16,171	18,009	17,234
Other	2,491	2,777	2,520	2,528	3,356	3,348	2,787	2,683
Social sciences	57,077	58,187	59,232	61,843	63,564	62,406	64,107	67,116
Fellowships	8,578	8,574	8,883	8,971	9,625	9,534	9,460	9,513
Research assistantships	8,021	7,840	7,842	7,848	7,966	7,783	7,764	7,755
Teaching assistantships	12,879	13,116	13,478	13,925	14,442	14,262	15,168	14,948
Traineeships	1,283	1,449	1,235	1,319	1,016	1,011	996	782
Other types of support	26,316	27,208	27,794	29,780	30,515	29,816	30,719	34,118
Self-support	22,697	23,441	24,236	25,320	26,333	25,737	26,065	28,961
Other	3,619	3,767	3,558	4,460	4,182	4,079	4,654	5,157
Engineering	87,539	84,616	82,241	85,134	89,834	90,911	95,077	101,495
Fellowships	7,223	7,169	7,218	7,151	7,818	7,868	7,974	8,145
Research assistantships	37,188	35,698	34,633	35,048	35,003	35,340	37,171	39,750
Teaching assistantships	12,335	11,997	11,744	12,043	12,396	12,510	13,281	12,934
Traineeships	1,037	941	1,017	992	921	921	879	889
Other types of support	29,756	28,811	27,629	29,900	33,696	34,272	35,772	39,777
Self-support	24,290	23,097	22,077	23,921	27,458	27,971	30,058	33,840
Other	5,466	5,714	5,552	5,979	6,238	6,301	5,714	5,937
Aerospace engineering	3,206	3,190	3,150	3,291	3,379	3,379	3,588	3,845
Fellowships	274	282	260	302	386	386	334	319
Research assistantships	1,562	1,451	1,366	1,387	1,478	1,478	1,566	1,706
Teaching assistantships	404	373	441	459	502	502	517	488
Traineeships	36	40	35	40	33	33	34	36
Other types of support	930	1,044	1,048	1,103	980	980	1,137	1,296
Self-support	670	703	708	789	725	725	869	1,013
Other	260	341	340	314	255	255	268	283
Agricultural engineering	900	842	855	893	917	917	1,022	1,084
Fellowships	79	64	59	34	40	40	62	73
Research assistantships	564	558	578	604	628	628	751	751
Teaching assistantships	83	64	69	68	61	61	50	32
Traineeships	11	11	2	11	36	36	0	2
Other types of support	163	145	147	176	152	152	159	226
Self-support	137	111	99	119	95	95	122	172
Other	26	34	48	57	57	57	37	54
Architecture ^a	na	na	na	na	na	3,981	5,092	5,988
Fellowships	na	na	na	na	na	335	395	387
Research assistantships	na	na	na	na	na	330	306	330
Teaching assistantships	na	na	na	na	na	723	900	848
Traineeships	na	na	na	na	na	10	1	4
Other types of support	na	na	na	na	na	2,583	3,490	4,419
Self-support	na	na	na	na	na	2,225	2,933	3,626
Other	na	na	na	na	na	358	557	793
Biomedical engineering	4,691	5,015	5,232	5,641	5,885	5,908	6,260	6,840
Fellowships	793	838	778	812	815	819	938	1,014
Research assistantships	2,008	2,047	2,231	2,432	2,548	2,559	2,969	3,259
Teaching assistantships	412	458	458	480	518	518	535	527
Traineeships	297	304	336	360	361	361	347	382
Other types of support	1,181	1,368	1,429	1,557	1,643	1,651	1,471	1,658
Self-support	1,083	1,219	1,268	1,370	1,336	1,336	1,222	1,435
Other	98	149	161	187	307	315	249	223
Chemical engineering	6,373	6,346	6,110	6,185	6,249	6,433	6,722	7,058

TABLE 64. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Fellowships	834	689	648	677	772	814	864	834
Research assistantships	3,600	3,749	3,593	3,652	3,598	3,702	3,789	4,063
Teaching assistantships	850	786	757	742	765	810	835	841
Traineeships	73	102	123	114	72	69	78	90
Other types of support	1,016	1,020	989	1,000	1,042	1,038	1,156	1,230
Self-support	794	780	769	757	793	787	912	992
Other	222	240	220	243	249	251	244	238
Civil engineering ^a	13,443	13,348	12,958	12,836	14,352	11,063	11,619	13,120
Fellowships	1,105	1,092	1,094	1,035	1,235	931	938	950
Research assistantships	5,022	4,858	4,440	4,339	4,461	4,262	4,386	4,893
Teaching assistantships	1,992	2,082	1,984	2,129	2,283	1,604	1,825	1,774
Traineeships	196	152	159	148	158	148	175	103
Other types of support	5,128	5,164	5,281	5,185	6,215	4,118	4,295	5,400
Self-support	4,276	4,287	4,493	4,448	5,311	3,484	3,624	4,660
Other	852	877	788	737	904	634	671	740
Electrical engineering	27,680	25,783	25,002	26,259	27,522	27,646	27,813	27,792
Fellowships	1,520	1,504	1,558	1,520	1,769	1,767	1,666	1,604
Research assistantships	10,760	10,136	10,176	9,834	9,623	9,706	10,070	10,475
Teaching assistantships	4,193	3,881	3,822	3,806	3,805	3,831	3,927	3,793
Traineeships	115	112	140	90	48	48	54	43
Other types of support	11,092	10,150	9,306	11,009	12,277	12,294	12,096	11,877
Self-support	9,435	8,605	7,722	9,165	10,348	10,368	10,530	10,470
Other	1,657	1,545	1,584	1,844	1,929	1,926	1,566	1,407
Engineering science	1,751	1,712	1,589	1,639	1,437	1,402	1,444	1,450
Fellowships	233	272	306	298	233	224	194	164
Research assistantships	768	861	808	750	571	557	618	721
Teaching assistantships	209	219	173	189	183	176	118	133
Traineeships	26	22	20	29	23	23	19	7
Other types of support	515	338	282	373	427	422	495	425
Self-support	306	227	185	266	285	284	340	306
Other	209	111	97	107	142	138	155	119
Industrial engineering	6,879	6,352	5,822	6,171	6,727	7,109	7,852	7,878
Fellowships	437	436	417	413	347	419	420	430
Research assistantships	1,820	1,661	1,481	1,556	1,539	1,631	1,905	1,747
Teaching assistantships	945	923	899	952	968	996	1,063	1,000
Traineeships	39	46	51	54	62	62	51	45
Other types of support	3,638	3,286	2,974	3,196	3,811	4,001	4,413	4,656
Self-support	2,898	2,519	2,251	2,493	3,231	3,449	3,742	3,900
Other	740	767	723	703	580	552	671	756
Mechanical engineering	13,119	12,478	11,984	12,408	12,913	12,903	13,456	15,215
Fellowships	988	914	921	981	1,078	1,076	1,176	1,318
Research assistantships	6,015	5,686	5,308	5,610	5,586	5,582	5,525	6,220
Teaching assistantships	2,273	2,178	2,171	2,229	2,316	2,317	2,389	2,441
Traineeships	114	98	104	89	62	54	67	132
Other types of support	3,729	3,602	3,480	3,499	3,871	3,874	4,299	5,104
Self-support	3,010	2,929	2,895	2,849	3,268	3,270	3,595	4,351
Other	719	673	585	650	603	604	704	753
Metallurgical/materials engineering	4,375	4,338	4,491	4,606	4,647	4,593	4,784	5,166
Fellowships	467	556	652	547	565	532	487	498
Research assistantships	2,851	2,726	2,764	2,847	2,814	2,829	2,996	3,119
Teaching assistantships	416	407	408	455	496	451	416	438
Traineeships	33	21	23	28	29	32	37	31
Other types of support	608	628	644	729	743	749	848	1,080
Self-support	504	507	525	582	578	586	638	878

TABLE 64. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and primary mechanism of support: 2003–09

Field and primary mechanism of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Other	104	121	119	147	165	163	210	202
Mining engineering	208	229	200	177	199	132	201	205
Fellowships	25	23	13	7	16	16	7	8
Research assistantships	100	92	94	62	86	74	112	108
Teaching assistantships	16	25	19	30	26	20	35	32
Traineeships	0	1	0	0	0	0	0	0
Other types of support	67	88	74	78	71	22	47	57
Self-support	49	57	47	50	56	19	40	42
Other	18	31	27	28	15	3	7	15
Nuclear engineering	752	809	840	910	960	951	941	968
Fellowships	95	109	122	141	142	142	141	158
Research assistantships	449	456	447	470	480	472	476	499
Teaching assistantships	56	68	62	62	85	85	76	89
Traineeships	4	6	7	6	8	8	12	9
Other types of support	148	170	202	231	245	244	236	213
Self-support	125	99	126	133	143	142	134	133
Other	23	71	76	98	102	102	102	80
Petroleum engineering	682	658	629	642	786	786	822	988
Fellowships	70	88	81	60	55	55	27	55
Research assistantships	260	269	302	314	410	410	435	524
Teaching assistantships	47	70	63	85	80	80	124	118
Traineeships	5	3	3	3	5	5	0	0
Other types of support	300	228	180	180	236	236	236	291
Self-support	178	156	130	127	164	164	187	216
Other	122	72	50	53	72	72	49	75
Engineering, nec	3,480	3,516	3,379	3,476	3,861	3,708	3,461	3,898
Fellowships	303	302	309	324	365	312	325	333
Research assistantships	1,409	1,148	1,045	1,191	1,181	1,120	1,267	1,335
Teaching assistantships	439	463	418	357	308	336	471	380
Traineeships	88	23	14	20	24	32	4	5
Other types of support	1,241	1,580	1,593	1,584	1,983	1,908	1,394	1,845
Self-support	825	898	859	773	1,125	1,037	1,170	1,646
Other	416	682	734	811	858	871	224	199
Health ^a	51,897	55,329	57,827	61,756	61,292	59,288	59,943	52,287
Fellowships	2,573	2,793	2,795	2,987	3,432	2,991	2,738	2,611
Research assistantships	6,711	7,035	7,231	7,221	7,235	6,707	6,485	6,457
Teaching assistantships	3,488	3,717	3,891	4,201	4,579	4,318	4,015	3,439
Traineeships	4,679	4,583	4,344	4,553	3,874	3,622	3,093	2,763
Other types of support	34,446	37,201	39,566	42,794	42,172	41,650	43,612	37,017
Self-support	29,032	31,492	33,472	35,718	34,591	34,087	36,932	31,554
Other	5,414	5,709	6,094	7,076	7,581	7,563	6,680	5,463

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 65. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field and primary mechanism of support: 2009

Field	Total	Fellowships	Research assistantships	Teaching assistantships	Traineeships	Other types of support
All surveyed fields	428,856	38,769	119,393	80,028	12,693	177,973
Science and engineering	376,569	36,158	112,936	76,589	9,930	140,956
Science	275,074	28,013	73,186	63,655	9,041	101,179
Agricultural sciences	10,246	719	5,492	1,353	31	2,651
Biological sciences	59,235	6,497	23,735	9,231	5,890	13,882
Anatomy	806	99	310	40	83	274
Biochemistry	4,831	668	2,462	540	557	604
Biology	11,550	1,182	3,348	4,354	432	2,234
Biometry/epidemiology	4,149	344	1,160	224	666	1,755
Biophysics	1,001	176	418	75	197	135
Botany	1,663	129	907	368	33	226
Cell biology	6,564	639	3,274	621	1,114	916
Ecology	1,391	303	403	413	27	245
Entomology/parasitology	892	44	592	115	3	138
Genetics	2,175	354	987	115	262	457
Microbiology/immunology/virology	4,638	527	2,380	362	770	599
Nutrition	3,376	197	881	458	116	1,724
Pathology	1,308	142	555	25	198	388
Pharmacology	2,884	417	1,378	166	429	494
Physiology	2,549	325	1,055	219	191	759
Zoology	659	35	259	273	8	84
Biological sciences, nec	8,799	916	3,366	863	804	2,850
Communication	5,429	292	582	2,111	19	2,425
Computer sciences	29,669	1,882	7,454	4,563	167	15,603
Earth, atmospheric, and ocean sciences	11,211	1,259	4,628	2,674	67	2,583
Atmospheric sciences	1,127	42	692	208	6	179
Geosciences	5,629	662	2,175	1,768	28	996
Oceanography	2,173	243	1,155	350	6	419
Earth/atmospheric/ocean sciences, nec	2,282	312	606	348	27	989
Family and consumer sciences/human sciences	1,903	133	434	464	1	871
Mathematical sciences	16,328	1,708	1,931	8,494	139	4,056
Mathematics/applied mathematics	12,422	1,358	1,352	6,971	110	2,631
Statistics	3,906	350	579	1,523	29	1,425
Multidisciplinary/interdisciplinary studies	3,420	626	615	483	45	1,651
Neuroscience	2,261	462	955	198	426	220
Physical sciences	33,671	2,895	14,354	12,788	432	3,202
Astronomy	1,348	244	743	278	5	78
Chemistry	19,304	1,531	7,713	7,942	284	1,834
Physics	12,679	1,087	5,781	4,518	133	1,160
Physical sciences, nec	340	33	117	50	10	130
Psychology	34,585	2,027	5,251	6,348	1,042	19,917
Clinical psychology	9,507	427	1,132	937	339	6,672
Psychology, general	9,451	911	1,785	2,976	339	3,440
Psychology, nec	15,627	689	2,334	2,435	364	9,805
Social sciences	67,116	9,513	7,755	14,948	782	34,118
Agricultural economics	1,892	153	911	267	2	559
Anthropology (cultural/social)	6,238	1,330	609	1,876	64	2,359
Economics (except agricultural)	10,953	1,648	1,222	3,437	99	4,547
Geography	3,113	291	668	1,081	20	1,053
History and philosophy of science	611	174	24	239	2	172

TABLE 65. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field and primary mechanism of support: 2009

Field	Total	Fellowships	Research assistantships	Teaching assistantships	Traineeships	Other types of support
Linguistics	2,262	440	302	725	21	774
Political science	24,190	3,067	1,817	3,244	319	15,743
Sociology	6,630	1,031	976	2,386	173	2,064
Sociology/anthropology	294	6	52	117	4	115
Social sciences, nec	10,933	1,373	1,174	1,576	78	6,732
Engineering	101,495	8,145	39,750	12,934	889	39,777
Aerospace engineering	3,845	319	1,706	488	36	1,296
Agricultural engineering	1,084	73	751	32	2	226
Architecture	5,988	387	330	848	4	4,419
Biomedical engineering	6,840	1,014	3,259	527	382	1,658
Chemical engineering	7,058	834	4,063	841	90	1,230
Civil engineering	13,120	950	4,893	1,774	103	5,400
Electrical engineering	27,792	1,604	10,475	3,793	43	11,877
Engineering science	1,450	164	721	133	7	425
Industrial engineering	7,878	430	1,747	1,000	45	4,656
Mechanical engineering	15,215	1,318	6,220	2,441	132	5,104
Metallurgical/materials engineering	5,166	498	3,119	438	31	1,080
Mining engineering	205	8	108	32	0	57
Nuclear engineering	968	158	499	89	9	213
Petroleum engineering	988	55	524	118	0	291
Engineering, nec	3,898	333	1,335	380	5	1,845
Health	52,287	2,611	6,457	3,439	2,763	37,017
Clinical medicine	16,018	1,051	2,346	539	1,118	10,964
Anesthesiology	161	4	5	0	5	147
Cardiology	36	0	31	0	2	3
Endocrinology	47	3	31	3	3	7
Gastroenterology	15	3	4	0	8	0
Hematology	9	0	6	2	0	1
Neurology	1,284	342	492	52	223	175
Obstetrics/gynecology	69	1	3	0	1	64
Oncology/cancer research	258	57	129	0	20	52
Ophthalmology	1	0	1	0	0	0
Otorhinolaryngology	2	0	2	0	0	0
Pediatrics	162	0	96	0	6	60
Preventive medicine/community health	11,753	449	1,256	390	676	8,982
Psychiatry	114	1	12	0	3	98
Pulmonary disease	12	0	3	0	8	1
Radiology	271	16	98	50	6	101
Surgery	26	8	3	0	5	10
Clinical medicine, nec	1,798	167	174	42	152	1,263
Other health	36,269	1,560	4,111	2,900	1,645	26,053
Dental sciences	1,564	47	119	210	80	1,108
Nursing	8,683	291	273	302	562	7,255
Pharmaceutical sciences	3,179	183	1,178	736	113	969
Speech pathology/audiology	9,804	422	674	486	459	7,763
Veterinary sciences	1,637	106	745	109	45	632
Other health, nec	11,402	511	1,122	1,057	386	8,326

nec = not elsewhere classified.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 66. Full-time graduate students in science and engineering fields in doctorate-granting institutions, by primary mechanism and primary source of support: 2003–09

Primary mechanism and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All sources	320,469	322,655	323,371	331,382	342,430	350,133	362,344	376,569
Federal	71,809	73,436	73,700	73,692	71,927	73,048	70,383	74,728
DOD	8,878	8,639	8,601	8,465	8,475	8,497	7,864	8,411
DOE	4,007	4,114	4,370	4,442	4,241	4,246	4,311	4,587
HHS	22,170	23,650	23,881	24,331	23,621	24,461	23,947	24,682
NIH	20,372	22,319	22,731	23,286	22,602	23,425	22,829	23,521
Other HHS	1,798	1,331	1,150	1,045	1,019	1,036	1,118	1,161
NASA	3,175	2,875	2,652	2,338	2,301	2,305	2,320	2,415
NSF	19,066	19,690	20,049	19,972	19,446	19,515	19,599	21,433
USDA	3,387	3,468	3,252	2,896	2,715	2,715	2,691	2,616
Other	11,126	11,000	10,895	11,248	11,128	11,309	9,651	10,584
Institutional	135,251	137,071	137,828	141,069	146,694	150,326	159,833	159,636
Other nonfederal	26,099	24,155	24,089	24,598	23,859	24,108	23,440	24,146
Domestic	23,371	21,615	21,748	22,156	21,248	21,483	19,933	20,519
Foreign	2,728	2,540	2,341	2,442	2,611	2,625	3,507	3,627
Self-support	87,310	87,993	87,754	92,023	99,950	102,651	108,688	118,059
Fellowships	31,360	31,879	33,231	33,345	34,430	35,158	35,625	36,158
Federal	6,912	7,183	7,464	7,383	7,485	7,758	7,587	7,950
DOD	436	412	363	410	490	496	529	581
DOE	151	129	149	165	196	198	165	156
HHS	1,361	1,507	1,410	1,451	1,552	1,732	1,755	1,757
NIH	1,190	1,382	1,320	1,393	1,489	1,667	1,666	1,664
Other HHS	171	125	90	58	63	65	89	93
NASA	264	260	278	259	283	284	285	301
NSF	3,118	3,283	3,462	3,239	3,196	3,224	3,169	3,410
USDA	91	81	72	47	118	119	123	119
Other	1,491	1,511	1,730	1,812	1,650	1,705	1,561	1,626
Institutional	19,740	20,346	21,662	21,842	22,932	23,323	24,181	24,254
Other nonfederal	4,708	4,350	4,105	4,120	4,013	4,077	3,857	3,954
Domestic	3,699	3,406	3,128	3,051	2,965	3,017	2,693	2,638
Foreign	1,009	944	977	1,069	1,048	1,060	1,164	1,316
Self-support	na	na	na	na	na	na	na	na
Research assistantships	105,715	105,791	105,136	105,604	106,018	107,360	109,825	112,936
Federal	54,094	55,141	54,848	54,238	53,906	54,473	52,932	56,010
DOD	6,815	6,217	6,036	5,842	6,047	6,061	6,063	6,541
DOE	3,758	3,847	4,070	4,091	3,960	3,962	4,039	4,315
HHS	15,070	16,345	16,482	16,768	16,559	17,007	16,465	16,864
NIH	13,705	15,357	15,687	16,010	15,759	16,196	15,657	16,003
Other HHS	1,365	988	795	758	800	811	808	861
NASA	2,778	2,515	2,233	1,946	1,918	1,921	1,935	2,005
NSF	15,153	15,549	15,652	15,706	15,408	15,450	15,407	16,876
USDA	3,112	3,233	3,041	2,628	2,387	2,386	2,399	2,345
Other	7,408	7,435	7,334	7,257	7,627	7,686	6,624	7,064
Institutional	35,399	35,494	34,987	35,287	37,008	37,665	41,861	41,431
Other nonfederal	16,222	15,156	15,301	16,079	15,104	15,222	15,032	15,495
Domestic	15,586	14,572	14,744	15,529	14,260	14,379	13,620	14,234
Foreign	636	584	557	550	844	843	1,412	1,261
Self-support	na	na	na	na	na	na	na	na
Teaching assistantships	67,737	67,569	68,588	70,003	71,459	73,762	77,384	76,589
Federal	1,326	1,303	1,442	1,442	1,380	1,423	979	1,231
DOD	na	na	na	na	na	na	na	na
DOE	48	58	78	80	49	49	57	71
HHS	324	268	311	325	277	295	40	61
NIH	283	245	273	290	259	273	na	na

TABLE 66. Full-time graduate students in science and engineering fields in doctorate-granting institutions, by primary mechanism and primary source of support: 2003–09

Primary mechanism and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Other HHS	41	23	38	35	18	22	40	61
NASA	33	30	50	46	35	35	33	45
NSF	284	282	373	411	339	339	358	343
USDA	80	63	53	73	70	70	56	45
Other	557	602	577	507	610	635	435	666
Institutional	65,422	65,326	66,212	67,632	68,892	71,121	75,330	74,233
Other nonfederal	989	940	934	929	1,187	1,218	1,075	1,125
Domestic	989	940	934	929	1,187	1,218	971	1,023
Foreign	na	na	na	na	na	na	104	102
Self-support	na	na	na	na	na	na	na	na
Traineeships	10,072	9,820	9,873	9,724	9,249	9,558	9,882	9,930
Federal	5,901	5,869	6,007	5,949	5,444	5,657	5,904	6,267
DOD	39	45	63	76	79	80	102	92
DOE	5	25	35	64	18	18	8	4
HHS	4,794	4,860	4,982	4,891	4,618	4,809	4,931	5,266
NIH	4,654	4,727	4,837	4,776	4,508	4,698	4,779	5,138
Other HHS	140	133	145	115	110	111	152	128
NASA	56	48	56	50	36	36	45	27
NSF	328	398	373	368	294	294	486	565
USDA	14	16	23	23	21	21	15	19
Other	665	477	475	477	378	399	317	294
Institutional	3,618	3,445	3,276	3,306	3,301	3,395	3,487	3,214
Other nonfederal	553	506	590	469	504	506	491	449
Domestic	465	404	528	401	422	424	446	404
Foreign	88	102	62	68	82	82	45	45
Self-support	na	na	na	na	na	na	na	na
Other types of support	105,585	107,596	106,543	112,706	121,274	124,295	129,628	140,956
Federal	3,576	3,940	3,939	4,680	3,712	3,737	2,981	3,270
DOD	1,588	1,965	2,139	2,137	1,859	1,860	1,170	1,197
DOE	45	55	38	42	18	19	42	41
HHS	621	670	696	896	615	618	756	734
NIH	540	608	614	817	587	591	727	716
Other HHS	81	62	82	79	28	27	29	18
NASA	44	22	35	37	29	29	22	37
NSF	183	178	189	248	209	208	179	239
USDA	90	75	63	125	119	119	98	88
Other	1,005	975	779	1,195	863	884	714	934
Institutional	11,072	12,460	11,691	13,002	14,561	14,822	14,974	16,504
Other nonfederal	3,627	3,203	3,159	3,001	3,051	3,085	2,985	3,123
Domestic	2,632	2,293	2,414	2,246	2,414	2,445	2,203	2,220
Foreign	995	910	745	755	637	640	782	903
Self-support	87,310	87,993	87,754	92,023	99,950	102,651	108,688	118,059

na = not applicable.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 67. Full-time graduate students in health fields in doctorate-granting institutions, by primary mechanism and primary source of support: 2003–09

Primary mechanism and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All sources	51,897	55,329	57,827	61,756	61,292	59,288	59,943	52,287
Federal	8,998	9,161	8,628	9,209	8,476	7,643	6,520	5,516
DOD	292	328	347	361	334	323	316	238
DOE	13	16	16	27	36	34	24	14
HHS	6,740	6,963	6,608	6,697	6,231	5,443	4,407	3,956
NIH	3,866	4,298	4,067	4,257	4,283	3,493	3,084	2,933
Other HHS	2,874	2,665	2,541	2,440	1,948	1,950	1,323	1,023
NASA	13	25	20	14	8	7	8	3
NSF	148	169	208	283	222	198	206	169
USDA	78	84	87	98	75	89	68	81
Other	1,714	1,576	1,342	1,729	1,570	1,549	1,491	1,055
Institutional	11,198	12,111	13,113	13,787	15,325	14,758	14,214	12,778
Other nonfederal	2,669	2,565	2,614	3,042	2,900	2,800	2,277	2,439
Domestic	2,345	2,321	2,423	2,861	2,653	2,558	2,029	2,147
Foreign	324	244	191	181	247	242	248	292
Self-support	29,032	31,492	33,472	35,718	34,591	34,087	36,932	31,554
Fellowships	2,573	2,793	2,795	2,987	3,432	2,991	2,738	2,611
Federal	629	716	705	782	1,022	798	697	630
DOD	21	36	23	39	49	43	50	20
DOE	1	1	3	7	7	5	3	0
HHS	446	516	464	507	636	456	394	403
NIH	366	412	363	439	591	413	333	352
Other HHS	80	104	101	68	45	43	61	51
NASA	4	4	2	1	2	2	2	1
NSF	54	76	81	92	103	76	73	45
USDA	4	5	0	0	3	2	0	0
Other	99	78	132	136	222	214	175	161
Institutional	1,433	1,609	1,665	1,759	1,975	1,795	1,666	1,595
Other nonfederal	511	468	425	446	435	398	375	386
Domestic	392	398	386	396	356	325	295	289
Foreign	119	70	39	50	79	73	80	97
Self-support	na	na	na	na	na	na	na	na
Research assistantships	6,711	7,035	7,231	7,221	7,235	6,707	6,485	6,457
Federal	2,926	3,200	3,137	3,177	3,185	2,786	2,420	2,362
DOD	70	95	87	56	58	54	64	59
DOE	12	15	12	15	19	19	20	14
HHS	2,321	2,616	2,570	2,552	2,593	2,189	1,873	1,817
NIH	2,009	2,312	2,276	2,298	2,312	1,907	1,699	1,637
Other HHS	312	304	294	254	281	282	174	180
NASA	4	16	11	6	4	3	4	0
NSF	61	50	85	111	99	101	119	103
USDA	72	74	77	91	64	78	65	76
Other	386	334	295	346	348	342	275	293
Institutional	3,075	3,168	3,336	3,212	3,238	3,166	3,336	3,375
Other nonfederal	710	667	758	832	812	755	729	720
Domestic	677	634	718	800	765	706	680	684
Foreign	33	33	40	32	47	49	49	36
Self-support	na	na	na	na	na	na	na	na
Teaching assistantships	3,488	3,717	3,891	4,201	4,579	4,318	4,015	3,439
Federal	192	207	125	216	188	180	40	46
DOD	na	na	na	na	na	na	na	na
DOE	0	0	0	4	1	1	0	0
HHS	56	75	46	88	129	119	22	15
NIH	31	56	40	42	46	33	na	na
Other HHS	25	19	6	46	83	86	22	15

TABLE 67. Full-time graduate students in health fields in doctorate-granting institutions, by primary mechanism and primary source of support: 2003–09

Primary mechanism and primary source of support	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
NASA	1	0	0	0	0	0	0	0
NSF	5	0	1	1	2	2	2	3
USDA	0	2	3	3	1	2	1	1
Other	130	130	75	120	55	56	15	27
Institutional	3,163	3,386	3,641	3,871	4,256	4,006	3,852	3,291
Other nonfederal	133	124	125	114	135	132	123	102
Domestic	133	124	125	114	135	132	120	100
Foreign	na	na	na	na	na	na	3	2
Self-support	na	na	na	na	na	na	na	na
Traineeships	4,679	4,583	4,344	4,553	3,874	3,622	3,093	2,763
Federal	3,972	3,865	3,542	3,659	3,088	2,890	2,169	1,759
DOD	3	4	6	4	36	35	30	17
DOE	0	0	0	0	1	1	0	0
HHS	3,442	3,344	3,049	3,044	2,487	2,296	1,746	1,408
NIH	1,255	1,282	1,102	1,179	1,090	900	789	722
Other HHS	2,187	2,062	1,947	1,865	1,397	1,396	957	686
NASA	2	3	6	7	0	0	0	0
NSF	25	36	33	24	18	18	5	12
USDA	0	0	0	0	1	1	0	1
Other	500	478	448	580	545	539	388	321
Institutional	574	559	641	701	588	534	747	838
Other nonfederal	133	159	161	193	198	198	177	166
Domestic	75	108	155	158	163	163	143	129
Foreign	58	51	6	35	35	35	34	37
Self-support	na	na	na	na	na	na	na	na
Other types of support	34,446	37,201	39,566	42,794	42,172	41,650	43,612	37,017
Federal	1,279	1,173	1,119	1,375	993	989	1,194	719
DOD	198	193	231	262	191	191	172	142
DOE	0	0	1	1	8	8	1	0
HHS	475	412	479	506	386	383	372	313
NIH	205	236	286	299	244	240	263	222
Other HHS	270	176	193	207	142	143	109	91
NASA	2	2	1	0	2	2	2	2
NSF	3	7	8	55	0	1	7	6
USDA	2	3	7	4	6	6	2	3
Other	599	556	392	547	400	398	638	253
Institutional	2,953	3,389	3,830	4,244	5,268	5,257	4,613	3,679
Other nonfederal	1,182	1,147	1,145	1,457	1,320	1,317	873	1,065
Domestic	1,068	1,057	1,039	1,393	1,234	1,232	791	945
Foreign	114	90	106	64	86	85	82	120
Self-support	29,032	31,492	33,472	35,718	34,591	34,087	36,932	31,554

na = not applicable.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 68. Doctorate-granting institutions ranked by 2009 graduate student total in science, engineering, and health fields: 2003–09

Rank	Institution	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
—	All institutions ^b	508,744	516,693	524,953	539,559	547,877	557,453	569,482	573,883
1	Walden U.	959	2,498	6,211	8,840	9,530	9,530	11,353	12,862
2	U. Southern CA	6,385	6,542	6,870	6,525	7,288	7,288	7,637	7,752
3	U. FL	6,653	6,740	6,918	7,311	7,443	7,633	7,919	7,496
4	TX A&M U. all campuses	5,835	5,650	5,728	5,887	6,146	6,146	6,584	6,927
5	U. MN all campuses	6,911	7,343	6,817	6,732	6,674	6,852	6,957	6,925
6	U. CO all campuses	6,183	6,157	5,371	5,467	5,557	5,614	6,068	6,460
7	U. WA	5,598	5,442	5,593	5,783	5,608	5,770	5,811	6,378
8	GA Institute of Technology all campuses	5,384	5,295	5,294	5,575	6,178	6,178	6,440	6,040
9	U. MI all campuses	6,468	6,396	6,109	6,073	6,155	6,155	5,971	5,943
10	U. IL Urbana-Champaign	5,317	5,516	5,352	5,349	5,523	5,581	5,690	5,921
11	MA Institute of Technology ^c	5,963	5,988	5,918	5,933	5,722	5,722	5,787	5,813
12	U. WI Madison	5,432	5,377	5,259	5,085	5,133	5,133	5,477	5,743
13	Stanford U.	4,898	5,356	5,392	5,615	5,590	5,590	5,948	5,603
14	OH State U. all campuses	5,071	5,058	5,112	4,830	5,367	5,391	5,501	5,578
15	Purdue U. all campuses	4,337	4,395	4,661	4,828	4,827	4,859	5,269	5,508
16	U. CA, Berkeley	5,727	5,785	5,781	5,768	5,811	5,811	5,459	5,490
17	NC State U.	3,961	4,130	4,202	4,178	4,927	4,927	5,126	5,399
18	U. MD College Park	4,780	4,850	4,870	4,862	4,920	4,957	5,159	5,208
19	U. CA, Los Angeles	5,808	5,130	5,427	5,468	5,715	5,715	5,459	5,185
20	U. IL Chicago	3,846	4,742	4,367	4,243	4,661	4,698	4,708	5,171
21	AZ State U. main campus	3,685	3,629	3,735	3,936	4,349	4,528	4,945	4,977
22	PA State U. all campuses	4,814	4,816	4,654	4,737	5,146	5,222	5,117	4,977
23	Cornell U. all campuses	4,057	4,040	4,096	4,167	4,349	4,393	4,591	4,853
24	George Washington U.	5,133	6,157	6,265	5,991	5,103	5,118	5,484	4,850
25	Boston U.	4,108	4,517	4,755	4,967	4,727	4,760	4,312	4,844
26	U. TX Austin	4,410	4,308	4,340	4,384	4,471	4,683	4,643	4,819
27	George Mason U.	3,456	3,120	3,166	3,377	3,948	4,342	4,556	4,757
28	Harvard U.	4,343	4,570	4,738	4,905	4,744	4,744	4,927	4,722
29	VA Polytechnic Institute and State U.	4,184	4,150	4,100	4,134	4,126	4,143	4,263	4,427
30	Columbia U. in the City of NY	2,429	3,634	3,995	4,154	4,268	4,268	4,325	4,196
31	Johns Hopkins U., The	3,250	3,518	3,771	3,815	3,924	3,924	3,881	4,172
32	IN U. all campuses	3,460	3,595	3,880	3,728	3,596	3,748	3,889	4,006
33	U. Pittsburgh all campuses	3,941	3,820	3,877	3,915	3,522	3,522	3,718	3,922
34	U. AZ	3,366	3,310	3,289	3,137	3,866	3,935	3,864	3,909
35	U. South FL	3,207	2,895	3,176	3,233	3,353	3,511	3,688	3,853
36	Rutgers, The State U. NJ all campuses	3,780	3,696	3,529	3,473	3,405	3,524	3,708	3,811
37	U. CA, Davis	3,451	3,519	3,572	3,563	3,604	3,614	3,568	3,687
38	U. NC Chapel Hill	3,435	3,378	3,551	3,455	3,329	3,380	3,763	3,580
39	LA State U. all campuses ^d	3,286	3,283	2,371	2,869	3,020	3,166	3,281	3,566
40	SUNY Buffalo all campuses	3,521	3,454	3,326	3,435	3,235	3,338	3,323	3,498
41	U. CA, San Diego	2,829	2,829	2,822	3,236	3,235	3,280	3,303	3,472
42	MI State U.	3,073	2,990	2,987	3,053	3,081	3,264	3,490	3,432
43	U. UT	2,633	2,973	2,968	3,094	3,214	3,370	3,351	3,427
44	U. Cincinnati all campuses	2,645	2,659	3,467	3,272	3,197	3,197	3,085	3,295
45	U. Central FL	2,944	3,023	3,035	2,991	2,784	2,862	2,892	3,285
46	IA State U.	2,936	2,911	2,574	2,828	2,733	2,929	3,181	3,204
47	NY U.	3,058	3,084	3,139	3,178	3,470	3,470	3,247	3,131
48	Northwestern U.	1,905	2,093	2,177	2,231	2,510	2,601	2,883	3,008
49	Carnegie Mellon U.	2,496	2,739	2,712	2,689	2,823	2,823	2,811	2,996
50	Nova Southeastern U.	2,745	3,246	3,297	3,287	3,263	3,263	3,468	2,996
51	FL State U.	1,868	1,960	2,017	2,067	2,520	2,788	2,698	2,966
52	Georgetown U.	896	1,099	1,146	2,599	2,606	2,798	2,832	2,941

TABLE 68. Doctorate-granting institutions ranked by 2009 graduate student total in science, engineering, and health fields: 2003–09

Rank	Institution	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
53	U. WI Milwaukee	2,192	2,328	2,382	2,473	2,587	2,587	2,695	2,933
54	U. CT all campuses	2,735	2,949	2,932	2,857	2,781	2,840	2,866	2,928
55	U. CA, Irvine	2,193	2,241	2,289	2,320	2,443	2,443	2,516	2,899
56	TX Tech U.	2,053	1,985	1,950	2,011	2,342	2,342	2,639	2,883
57	U. KS all campuses	3,391	3,263	3,268	3,278	2,874	2,959	3,179	2,804
58	U. OK all campuses	2,644	2,591	2,604	2,505	2,638	2,731	2,819	2,693
59	U. TN Knoxville	2,809	2,963	3,021	2,996	2,652	2,922	3,053	2,688
60	CO State U.	2,818	2,640	2,639	2,617	2,635	2,678	2,632	2,678
61	U. TX Arlington	3,219	3,159	2,782	2,565	2,885	2,885	2,926	2,671
62	Wayne State U.	3,037	2,536	2,663	2,676	2,927	3,140	2,825	2,652
63	IL Institute of Technology	1,459	1,403	1,276	2,145	2,443	2,444	2,630	2,606
64	SUNY Albany	2,502	2,371	2,431	2,565	2,548	2,616	2,595	2,569
65	Syracuse U. all campuses	1,861	1,763	1,706	1,819	2,350	2,467	2,459	2,521
66	U. KY all campuses	2,697	2,515	2,973	3,151	2,348	2,436	2,488	2,507
67	U. TX Dallas	2,082	1,984	1,948	2,068	2,161	2,161	2,387	2,487
68	U. MA Amherst	2,300	2,232	2,198	2,316	2,409	2,483	2,489	2,441
69	U. Houston	2,059	2,044	2,101	2,062	2,098	2,098	2,187	2,427
70	Stevens Institute of Technology	1,240	1,438	1,462	1,574	1,807	1,807	2,090	2,424
71	Southern IL U. Carbondale	1,892	1,723	1,819	1,824	1,901	1,901	2,248	2,421
72	U. PA	2,227	2,238	2,310	2,255	2,248	2,248	2,347	2,404
73	FL International U.	2,081	2,035	2,097	2,454	2,643	2,754	2,658	2,398
74	OR State U.	1,846	1,860	1,942	2,074	2,084	2,177	2,234	2,380
75	NJ Institute of Technology	2,314	2,287	2,229	2,296	2,347	2,379	2,335	2,364
76	SUNY Stony Brook all campuses	3,201	3,124	3,021	3,527	3,279	3,279	2,186	2,336
77	U. HI Manoa	1,949	2,108	2,092	2,058	2,036	2,036	2,273	2,333
78	VA Commonwealth U.	2,020	2,074	1,944	2,020	2,175	2,175	2,193	2,312
79	San Diego State U.	2,421	2,211	2,473	2,270	2,364	2,364	2,556	2,273
80	Naval Postgraduate School	985	944	952	976	985	985	2,309	2,271
81	Northeastern U.	1,772	1,854	1,972	2,172	2,266	2,266	2,125	2,195
82	Temple U.	3,227	2,602	2,326	2,253	1,814	1,873	2,109	2,192
83	Old Dominion U.	1,910	1,913	1,939	2,067	2,042	2,104	2,029	2,186
84	U. MO-Columbia	1,930	1,991	2,056	2,067	2,120	2,560	2,230	2,186
85	Drexel U.	2,651	2,883	3,233	3,233	2,539	2,544	1,798	2,185
86	U. Chicago	1,818	1,388	1,658	1,835	1,780	1,780	2,173	2,182
87	U. IA	2,227	2,317	2,337	2,285	2,255	2,323	2,378	2,163
88	U. NE Lincoln	1,696	1,686	1,639	1,693	1,747	1,872	2,072	2,152
89	Portland State U.	1,644	1,547	1,824	1,809	1,819	1,956	2,017	2,142
90	Clemson U.	1,718	1,763	1,698	1,657	1,713	1,713	1,885	2,134
91	U. GA	2,028	2,070	2,035	1,992	2,093	2,093	2,220	2,119
92	OK State U. all campuses	1,713	1,644	1,550	1,578	1,869	1,971	2,057	2,115
93	KS State U.	1,949	1,931	1,863	1,824	1,957	1,957	2,204	2,114
94	Auburn U. all campuses	1,792	1,832	1,817	1,882	1,923	1,923	2,018	2,107
95	U. NM all campuses	2,417	2,440	2,462	2,436	2,534	2,534	2,519	2,105
96	U. DE	1,796	1,835	1,904	1,961	1,795	1,861	1,887	2,073
97	U. VA all campuses	2,039	2,082	2,087	2,077	2,124	2,124	2,143	2,071
98	American U.	1,912	1,869	1,838	1,751	1,890	1,890	1,934	2,059
99	Yale U.	1,930	1,938	1,919	1,961	2,039	2,039	2,102	2,024
100	WV U.	2,177	2,108	2,116	2,161	2,235	2,256	2,120	2,015
101	U. CA, Santa Barbara	2,049	1,972	2,006	1,928	2,006	2,031	2,032	1,994
102	Duke U.	1,693	1,792	1,820	1,786	1,829	1,829	1,723	1,986
103	CUNY Graduate Ctr.	1,920	2,035	1,972	2,062	2,023	2,023	2,016	1,958
104	OH U. all campuses	1,046	965	1,042	1,042	1,583	1,583	1,648	1,907
105	WA State U.	1,594	1,550	1,501	1,640	1,568	1,568	1,638	1,897

TABLE 68. Doctorate-granting institutions ranked by 2009 graduate student total in science, engineering, and health fields: 2003–09

Rank	Institution	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
106	U. SC all campuses	1,647	1,558	1,486	1,652	1,829	1,829	1,778	1,896
107	U. Denver	927	901	937	1,218	1,291	1,382	1,367	1,866
108	U. MD Baltimore County	1,265	1,250	1,425	1,447	1,464	1,464	1,669	1,866
109	U. North TX	1,545	1,349	1,358	1,444	1,559	1,692	1,593	1,863
110	Washington U. St. Louis	1,737	1,832	1,773	2,142	2,023	2,023	2,003	1,831
111	Princeton U.	1,559	1,594	1,538	1,678	1,703	1,703	1,807	1,806
112	Polytechnic U.	746	737	843	954	1,201	1,201	1,566	1,805
113	CA State U. Long Beach	1,585	1,686	1,620	1,911	1,908	1,942	1,773	1,798
114	U. Akron all campuses	1,445	1,367	1,376	1,393	1,454	1,513	1,639	1,790
115	U. AR main campus	1,414	1,571	1,578	1,652	1,701	1,701	1,761	1,785
116	U. NC Charlotte	1,251	1,249	1,293	1,330	1,492	1,492	1,662	1,785
117	MS State U.	1,301	1,582	1,586	1,600	1,761	1,761	1,760	1,770
118	Tufts U.	1,375	1,493	1,525	1,461	1,463	1,505	1,607	1,738
119	Case Western Reserve U.	1,752	1,811	1,710	1,652	1,694	1,694	1,703	1,701
120	U. NV, Las Vegas	1,009	1,107	1,167	1,318	1,472	1,525	1,606	1,688
121	NM State U. all campuses	1,297	1,350	1,346	1,292	1,422	1,422	1,546	1,662
122	Teachers C. Columbia U.	1,508	1,481	1,504	1,532	1,551	1,551	1,583	1,657
123	U. TX San Antonio	604	588	1,089	1,139	1,444	1,478	1,484	1,643
124	Wichita State U.	1,572	1,514	1,409	1,429	1,460	1,543	1,475	1,630
125	Antioch U. all campuses	1,287	1,368	1,429	1,410	1,574	1,574	1,560	1,609
126	GA State U.	1,583	1,581	1,652	1,651	1,378	1,378	1,388	1,607
127	U. AL Birmingham, The	2,335	2,405	2,413	2,322	2,238	2,238	2,032	1,606
128	Brigham Young U. all campuses	1,463	1,095	1,578	1,735	1,434	1,434	1,519	1,584
129	DePaul U.	2,996	3,227	3,058	2,914	2,574	2,574	2,042	1,579
130	SUNY Binghamton	1,413	1,318	1,275	1,455	1,488	1,488	1,525	1,579
131	Vanderbilt U.	1,354	1,409	1,467	1,452	1,504	1,504	1,583	1,552
132	TX Woman's U.	1,780	1,897	2,253	2,140	1,183	1,366	1,349	1,550
133	FL Atlantic U.	1,311	1,284	1,315	1,345	1,371	1,493	1,514	1,544
134	Western MI U.	1,701	1,583	1,367	1,440	1,332	1,522	1,728	1,539
135	U. MA Lowell	1,341	1,211	1,194	1,337	1,247	1,247	1,363	1,511
136	U. CA, Riverside	1,143	1,194	1,239	1,258	1,384	1,384	1,476	1,504
137	Eastern MI U.	891	970	1,021	1,112	1,184	1,310	1,414	1,479
138	MO U. of Science & Technology	1,291	1,071	1,071	1,316	1,223	1,223	1,318	1,460
139	U. Rochester	1,341	1,414	1,479	1,558	1,599	1,599	1,633	1,459
140	New School, The	1,120	1,247	1,285	1,290	1,342	1,342	1,383	1,454
141	U. Louisville	1,605	1,633	1,583	1,572	1,441	1,466	1,454	1,450
142	TX State U. San Marcos	965	974	938	911	1,132	1,274	1,327	1,449
143	U. TX Health Science Ctr. Houston	1,374	1,337	1,363	1,343	1,342	1,342	1,425	1,447
144	Emory U.	1,142	1,178	1,243	1,256	1,275	1,275	1,394	1,420
145	Wright State U. all campuses	1,369	1,375	1,384	1,315	1,360	1,360	1,361	1,419
146	Tulane U. ^d	2,187	2,169	NA	1,230	1,287	1,287	1,368	1,416
147	U. Bridgeport	699	631	616	897	1,477	1,477	1,809	1,405
148	Northern IL U.	1,478	1,504	1,560	1,590	1,607	1,607	1,663	1,404
149	U. MO-Kansas City	1,036	981	1,069	1,145	1,209	1,209	1,367	1,400
150	Kent State U. all campuses	951	966	936	966	984	1,017	1,045	1,399
151	UT State U.	1,359	1,258	1,307	1,223	1,294	1,294	1,315	1,353
152	U. Miami	1,295	1,285	1,323	1,414	1,360	1,360	1,207	1,303
153	Rochester Institute of Technology	707	733	714	744	848	848	1,408	1,287
154	Long Island U. all campuses ^e	2,252	2,275	2,656	2,613	1,836	1,836	1,205	NA
155	ND State U. all campuses	1,113	1,076	1,073	908	1,018	1,094	1,135	1,231
156	Cleveland State U.	1,489	1,425	1,381	1,381	1,456	1,456	1,569	1,228
157	U. NV, Reno	1,192	1,197	1,200	1,236	1,290	1,301	1,460	1,226
158	U. ND all campuses	724	695	809	891	944	980	1,172	1,217
159	Towson U.	959	997	1,057	1,037	1,059	1,059	1,102	1,199

TABLE 68. Doctorate-granting institutions ranked by 2009 graduate student total in science, engineering, and health fields: 2003–09

Rank	Institution	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
160	Fairleigh Dickinson U. all campuses	1,432	1,603	1,784	1,735	1,171	1,269	1,256	1,195
161	Brown U.	894	1,027	1,004	1,002	1,084	1,084	1,109	1,185
162	CA Institute of Technology	1,273	1,288	1,268	1,239	1,221	1,221	1,215	1,179
163	U. ID	1,311	1,254	1,211	1,051	1,024	1,024	1,075	1,173
164	Seton Hall U.	841	879	1,015	1,000	971	971	1,105	1,165
165	U. CA, Santa Cruz	983	983	995	992	1,003	1,003	1,118	1,162
166	U. RI	1,227	1,220	1,265	1,175	1,050	1,050	1,071	1,134
167	U. of Notre Dame	1,037	1,028	1,071	1,075	1,107	1,107	1,080	1,123
168	CUNY The City C.	894	900	912	869	932	932	967	1,112
169	U. Toledo ^f	908	908	898	789	1,548	1,548	1,485	1,106
170	Pepperdine U.	813	833	931	942	932	947	683	1,102
171	Fielding Institute, The	1,084	1,057	629	611	936	1,020	1,076	1,096
172	U. PR Rio Piedras Campus	1,330	1,306	1,588	1,497	1,179	1,179	1,084	1,094
173	CO School of Mines	729	735	748	776	846	846	945	1,084
174	U. AL, The	1,047	1,017	909	889	910	910	930	1,078
175	East Carolina U.	706	933	1,109	1,445	1,558	1,618	1,780	1,077
176	Rice U.	962	1,009	1,041	1,072	1,086	1,086	1,042	1,061
177	Rensselaer Polytechnic Institute	1,215	1,074	972	1,064	1,017	1,063	1,070	1,060
178	Brandeis U.	413	399	384	396	749	951	1,003	1,051
179	St. Louis U. all campuses	898	959	1,128	1,139	1,350	1,390	1,635	1,050
180	U. WY	1,002	994	1,025	964	902	941	956	1,050
181	CUNY Queens C.	491	211	666	709	698	698	775	1,047
182	St. John's U. (Jamaica, NY)	763	826	1,362	1,484	1,003	1,003	1,026	1,030
183	Lehigh U.	763	803	816	808	861	861	878	1,029
184	U. NH	1,070	1,121	1,131	1,104	1,095	1,095	1,083	1,009
185	FL Institute of Technology	965	1,043	966	874	949	949	936	1,000
186	U. Southern MS	762	909	974	846	834	834	916	997
187	U. NE Omaha	836	830	858	901	937	996	971	983
188	Villanova U.	849	882	830	811	846	886	921	983
189	U. TX El Paso	931	1,130	988	1,101	1,076	1,076	930	972
190	Worcester Polytechnic Institute	678	638	683	690	663	663	689	939
191	Loyola U. Chicago	860	732	781	770	940	940	1,127	937
192	Alliant International U.	1,250	1,211	1,252	1,327	1,283	1,283	1,406	927
193	Montclair State U.	507	501	551	569	538	538	694	926
194	MI Technological U.	705	746	738	753	759	759	813	924
195	U. AL Huntsville, The	1,207	1,135	1,046	1,052	1,121	1,121	936	922
196	Santa Clara U. ^e	804	765	785	785	747	747	NA	917
197	MT State U. Bozeman	704	673	675	701	779	875	880	898
198	Bowling Green State U. all campuses	656	673	656	689	671	747	869	887
199	IL State U.	660	624	640	636	699	814	860	887
200	CUNY Hunter C.	994	918	1,061	1,080	1,137	1,137	669	885
201	U. PR Mayaguez Campus	885	906	888	877	882	882	884	883
202	Southern Methodist U.	961	1,170	1,293	1,222	1,227	1,227	1,201	880
203	U. Memphis, The	1,291	946	941	893	836	836	813	871
204	U. Dayton	554	534	513	502	899	899	850	867
205	U. PR Medical Sciences Campus	1,047	911	963	958	970	970	920	864
206	U. AK Fairbanks all campuses	572	625	602	661	672	807	802	859
207	Fordham U.	419	411	380	430	557	557	651	840
208	U. NC Greensboro	799	979	1,033	1,070	1,166	1,202	763	819
209	U. ME	734	736	744	728	812	812	831	817
210	TX A&M U. Kingsville	616	703	712	708	1,045	1,045	833	814
211	U. CA, San Francisco	1,252	1,215	1,223	1,173	884	884	954	795
212	Miami U. all campuses	582	584	633	638	623	623	644	781

TABLE 68. Doctorate-granting institutions ranked by 2009 graduate student total in science, engineering, and health fields: 2003–09

Rank	Institution	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
213	U. IL Springfield	826	548	644	773	796	796	751	780
214	U. VT	717	718	746	757	782	782	728	771
215	Dartmouth C.	649	671	702	672	720	720	708	768
216	Claremont Graduate U.	645	693	711	697	681	681	729	761
217	Adelphi U.	580	682	738	767	771	771	723	749
218	Oakland U.	1,126	1,138	1,149	1,181	984	984	951	749
219	Indiana U. PA all campuses	607	614	552	648	670	676	685	747
220	U. MT-Missoula, The	741	765	789	776	743	743	725	741
221	Ball State U.	838	728	834	854	938	938	1,053	735
222	Azusa Pacific U.	355	419	446	478	516	516	595	733
223	Boston C.	623	657	631	652	868	868	732	728
224	TX A&M U. Commerce	344	306	391	353	406	406	393	727
225	U. MO-St. Louis	683	707	659	699	671	671	693	727
226	U. Northern CO	431	585	653	605	780	898	844	724
227	Northern AZ U.	843	704	668	1,117	976	976	853	722
228	U. OR	752	738	744	727	680	680	701	721
229	U. of Medicine and Dentistry NJ	386	479	533	578	694	694	662	711
230	Pontifical Catholic U. PR, The	479	486	517	546	549	549	647	706
231	Marshall U.	739	748	775	747	683	686	692	705
232	Loyola C.	634	633	681	692	663	663	624	696
233	Air Force Institute of Technology	323	897	966	806	755	755	655	689
234	Howard U.	799	827	732	701	630	630	611	685
235	U. Central AR	449	477	589	745	763	779	956	685
236	Lamar U.	689	774	547	501	575	575	608	683
237	U. LA Lafayette	575	566	650	553	585	585	687	682
238	Quinnipiac U.	446	526	484	447	494	494	561	679
239	U. TX Southwestern Medical Ctr. Dallas	551	626	693	682	705	705	726	676
240	SD State U.	638	655	654	665	523	523	598	666
241	Middle TN State U.	251	268	280	273	335	350	618	660
242	U. SD	292	371	368	392	318	318	351	656
243	Yeshiva U.	657	659	776	722	712	712	709	655
244	Central MI U.	674	689	682	666	563	597	597	654
245	East TN State U.	606	534	609	720	820	852	902	650
246	Southwest MO State U.	395	480	527	600	676	676	729	635
247	Catholic U. America, The	459	502	486	498	352	352	593	620
248	Roosevelt U.	613	644	627	683	701	701	506	619
249	Philadelphia C. of Osteopathic Medicine	456	473	364	371	394	394	636	617
250	U. AR for Medical Sciences	498	494	523	539	583	583	583	607
251	U. North TX Health Science Ctr. Ft. Worth	436	424	432	472	473	473	517	603
252	TX Southern U.	948	669	943	890	390	453	505	599
253	U. South AL	1,080	1,220	1,269	1,369	1,600	1,633	1,578	594
254	Boise State U.	369	395	422	442	524	546	500	586
255	U. MA Boston	705	741	746	732	776	776	851	586
256	Baylor C. of Medicine	517	533	662	685	716	716	679	582
257	Maharishi U. of Management	223	277	368	366	535	535	632	568
258	Loma Linda U.	1,157	1,181	1,229	1,086	552	590	650	566
259	U. NE Medical Ctr.	459	464	474	532	607	607	607	565
260	NY Medical C.	310	378	378	392	469	469	474	555
261	U. NC Wilmington	233	323	337	362	437	437	450	537
262	Sacred Heart U.	265	270	242	241	310	310	394	535
263	U. Detroit Mercy ^e	643	594	598	630	516	516	NA	NA
264	ID State U.	582	582	682	648	599	599	609	533
265	Baylor U.	400	416	414	483	587	594	675	532

TABLE 68. Doctorate-granting institutions ranked by 2009 graduate student total in science, engineering, and health fields: 2003–09

Rank	Institution	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
266	FL A&M U.	413	458	460	527	496	496	552	530
267	NC Agricultural and Technical State U.	442	343	322	394	377	392	456	516
268	TN State U.	528	521	579	372	592	592	416	512
269	Southern U. and A&M C. all campuses	889	908	916	909	550	574	575	505
270	Marquette U.	1,187	1,239	1,173	1,188	1,157	1,157	714	496
271	Stephen F. Austin State U.	382	450	398	409	418	418	548	495
272	U. Baltimore	354	405	386	399	442	442	470	494
273	U. MS all campuses	763	806	854	833	575	575	462	489
274	Pace U. all campuses	1,259	1,030	872	838	628	628	673	483
275	Wake Forest U.	393	395	412	436	455	472	453	469
276	OR Health & Science U. ^g	286	296	307	305	328	328	574	466
277	C. of William and Mary all campuses	440	454	447	473	455	455	462	464
278	U. MD Baltimore	960	1,080	925	1,106	1,286	1,286	1,350	463
279	TX A&M U. System Health Science Ctr. ^h	97	108	105	95	92	92	548	460
280	U. TX Health Science Ctr. San Antonio	390	556	412	417	600	600	434	450
281	Barry U.	726	760	792	814	469	469	444	445
282	Lawrence Technological U.	233	306	342	416	555	555	451	443
283	SUNY C. of Environmental Science and Forestry	402	398	429	392	388	388	400	443
284	LA Tech U.	537	664	542	463	407	407	408	433
285	Jackson State U.	322	324	393	347	366	366	407	427
286	U. MA Dartmouth	387	377	414	465	456	456	469	426
287	U. MA Worcester	411	475	569	549	567	567	406	418
288	GA Southern U.	315	349	333	341	406	406	437	411
289	U. Tulsa	433	392	356	361	351	351	373	406
290	U. Northern IA	198	222	219	180	237	293	286	382
291	AR State U. main campus	359	450	449	534	347	347	364	374
292	Hofstra U.	417	522	502	475	480	480	483	371
293	U. San Diego	223	241	257	294	321	334	359	371
294	James Madison U.	313	278	299	328	318	348	340	370
295	TX A&M U. Corpus Christi	509	551	461	459	509	509	317	370
296	Clark U.	380	379	347	323	336	336	344	363
297	U. La Verne	347	398	423	388	371	371	408	357
298	Duquesne U.	448	447	449	489	478	478	387	356
299	West TX A&M U.	249	289	321	333	357	357	378	355
300	Morgan State U.	299	346	331	311	363	373	381	354
301	CA Institute of Integral Studies	458	542	609	631	648	648	714	350
302	Rush U.	413	445	458	541	457	457	705	345
303	Pacific Graduate School of Psychology	276	267	258	272	298	298	322	343
304	Prairie View A&M U.	402	311	434	465	514	514	458	338
305	U. AR Little Rock	310	308	244	290	229	229	251	333
306	TN Technological U.	272	293	278	259	256	256	245	328
307	Clarkson U.	255	269	290	321	332	344	350	322
308	Sam Houston State U.	386	440	163	275	253	253	288	315
309	NM Institute of Mining and Technology	311	316	318	302	304	304	320	314
310	U. of the Sciences Philadelphia	217	266	262	295	283	283	285	308
311	CUNY John Jay C. of Criminal Justice	1,361	1,541	1,567	1,527	1,721	1,721	1,709	301
312	U. TX Medical Branch	736	714	873	663	335	335	314	299
313	Mercer U. all campuses	178	155	178	213	474	474	400	295
314	U. Hartford	517	507	516	558	538	538	417	290
315	Andrews U.	241	217	232	237	235	235	254	286
316	Thomas Jefferson U.	527	527	638	702	613	613	260	283
317	U. TN Health Science Ctr.	316	305	285	295	271	271	261	277
318	Creighton U.	231	236	229	198	193	193	197	272
319	U. TN Chattanooga	413	420	465	482	499	499	272	265

TABLE 68. Doctorate-granting institutions ranked by 2009 graduate student total in science, engineering, and health fields: 2003–09

Rank	Institution	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
320	SD School of Mines and Technology	289	272	234	235	231	231	234	262
321	Forest Institute of Professional Psychology	209	214	205	217	221	221	231	257
322	Carlos Albizu U. (San Juan, PR)	644	656	649	621	581	581	572	250
323	Mayo Graduate School	207	232	224	246	229	229	243	250
324	Clark Atlanta U.	155	173	180	183	249	249	197	243
325	IN State U. all campuses	368	593	693	808	464	499	296	235
326	Medical U. SC	259	303	303	411	255	255	259	235
327	Marywood U.	232	608	363	357	221	320	235	234
328	Hampton U.	437	468	493	506	226	226	229	232
329	Fuller Theological Seminary CA	346	348	386	384	341	341	235	228
330	McNees State U.	220	214	188	185	340	340	193	226
331	Albany Medical C.	108	153	180	184	228	228	270	224
332	Eastern VA Medical School	213	211	192	207	225	225	239	218
333	Chapman U.	406	446	507	411	470	470	54	216
334	Rockefeller U.	167	193	200	199	178	178	225	215
335	Medical C. GA	218	215	249	297	369	369	412	202
336	Tuskegee U.	131	131	109	123	115	115	142	182
337	U. West GA	204	170	189	168	204	205	206	181
338	Mt. Sinai School of Medicine	213	204	215	241	301	301	259	178
339	TX Christian U.	117	125	132	151	171	183	225	174
340	Gallaudet U.	57	95	94	101	68	68	149	171
341	Medical C. WI	151	159	181	202	220	220	194	171
342	U. of the Pacific	204	208	201	204	221	238	253	170
343	U. LA Monroe	132	134	111	107	161	176	176	168
344	Uniformed Services U. of the Health Sciences	165	166	168	184	173	173	163	166
345	AL A&M U.	229	198	182	221	224	224	179	151
346	Xavier U.	313	339	390	389	384	384	240	151
347	Alfred U. all campuses	162	161	151	153	212	212	168	133
348	SUNY Upstate Medical U.	113	155	152	143	129	129	127	125
349	U. MD Eastern Shore	225	193	199	218	236	236	134	120
350	Wesleyan U.	135	134	126	120	127	127	121	118
351	Morehouse School of Medicine	21	32	26	27	28	28	31	116
352	Pardee RAND Graduate School of Policy Studies	83	91	101	96	103	103	111	115
353	Meharry Medical C.	132	101	81	71	77	77	82	101
354	VA State U.	75	80	85	73	74	74	105	100
355	DE State U.	11	7	50	84	81	81	91	93
356	Russell Sage C. all campuses	309	270	260	249	194	194	220	81
357	SUNY Health Science Ctr. Brooklyn	91	86	82	87	83	83	81	81
358	Bryn Mawr C.	99	84	87	84	84	84	98	69
359	MA C. of Pharmacy and Health Sciences	127	90	88	66	55	55	53	56
360	SUNY C. of Optometry	30	28	22	27	28	28	35	49
361	Biola U.	40	36	38	43	34	34	42	48
362	Rosalind Franklin U. of Medicine and Science	235	215	197	105	43	43	41	42
363	Ponce School of Medicine	24	25	29	27	30	30	30	33
364	AL State U.	30	14	26	20	39	39	19	29
365	Woods Hole Oceanographic Institution	128	139	139	145	na	na	na	na

TABLE 68. Doctorate-granting institutions ranked by 2009 graduate student total in science, engineering, and health fields: 2003–09

Rank	Institution	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
–	Baylor C. of Dentistry ^h	75	70	72	73	72	72	na	na
–	Medical U. OH ^f	371	112	131	133	na	na	na	na
–	OGI School of Science & Engineering at OR Health & Science U. ^g	341	197	145	192	146	146	na	na

na = not applicable; school did not exist under this name. NA = not available; data were not collected from this institution in this year.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

^b Totals for 2003–09 represent the number of graduate students in all institutions that were doctorate-granting in 2009 and differ from the totals in other tables for doctorate-granting institutions in this report. See appendix A, "Technical Notes," for further detail. Imputed counts associated with nonparticipating institutions are not listed in this table for 2008 and later years but are included in the "all institutions" totals for each year.

^c Graduate students in joint programs of Woods Hole Oceanographic Institution and MA Institute of Technology are reported under MA Institute of Technology from 2007 to 2009.

^d Tulane U. and the two LA State U. New Orleans campuses were closed in fall 2005 due to Hurricane Katrina and did not report data.

^e Totals for "all institutions" include data imputed for non-responding institutions; for 2008 and later years, data imputed for non-responding institutions are not shown separately.

^f In 2007 Medical U. OH merged with U. Toledo.

^g Starting in 2008 graduate students at OGI School of Science & Engineering are reported under OR Health & Science U.

^h Starting in 2008 graduate students at Baylor C. of Dentistry are reported under TX A&M U. System Health Science Ctr.

NOTE: Tied institutions are ranked alphabetically.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 69. Postdoctoral appointees in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	46,700	47,202 r	48,503	49,283 r	50,657	50,785	54,087	57,714
Science and engineering	33,639	34,028 r	34,407	34,831 r	35,843	36,172	38,135	40,717
Science	29,829	30,081 r	30,243	30,192 r	30,940	31,235	32,678	34,306
Agricultural sciences	1,054	958	1,006	927	948	985	1,146	1,080
Biological sciences	18,618	18,697 r	18,739	18,797 r	19,204	19,095	19,794	20,125
Anatomy	471	477	417	377	364	341	350	371
Biochemistry	2,628	2,526 r	2,553	2,416	2,365	2,305	2,306	2,348
Biology	2,073	1,945	2,006	2,310 r	2,430	2,333	2,500	2,423
Biometry/epidemiology	244	238	259	300	337	349	330	395
Biophysics	195	218	191	224	187	186	165	180
Botany	560	571	590	636	612	610	625	640
Cell biology	2,348	2,333	2,445	2,407	2,387	2,429	2,376	2,632
Ecology	189	170	187	192	208	200	221	233
Entomology/parasitology	255	289	281	241	246	246	222	248
Genetics	1,037	941	1,031	851	934	940	989	1,054
Microbiology/immunology/virology	2,346	2,150 r	2,257	2,150	2,339	2,257	2,200	2,259
Nutrition	249	280	306	259	324	298	243	214
Pathology	1,944	1,827 r	1,400	1,587	1,573	1,576	1,791	1,791
Pharmacology	1,498	1,530	1,514	1,436	1,345	1,349	1,411	1,523
Physiology	1,249	1,279 r	1,295	1,260	1,187	1,318	1,328	1,427
Zoology	77	100	134	103	103	101	68	78
Biological sciences, nec	1,255	1,823	1,873	2,048	2,263	2,257	2,669	2,309
Communication ^a	ne	ne	ne	ne	ne	30	32	38
Computer sciences	353	384	406	465 r	513	453	490	591
Earth, atmospheric, and ocean sciences	1,182	1,263	1,364	1,495 r	1,321	1,249	1,335	1,420
Atmospheric sciences	109	128	123	128	117	119	116	124
Geosciences	463	507	521	542 r	510	514	539	535
Oceanography	250	300	347	346	337	337	327	409
Earth/atmospheric/ocean sciences, nec	360	328	373	479	357	279	353	352
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	8	19	22
Mathematical sciences	449	468	496	579 r	621	624	723	737
Mathematics/applied mathematics	407	420	439	512 r	579	571	643	675
Statistics	42	48	57	67	42	53	80	62
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	244	348	458
Neuroscience ^a	na	na	na	na	na	285	343	642
Physical sciences	6,812	7,048	6,980	6,672 r	6,742	6,701	6,872	7,424
Astronomy	319	367	388	360	400	401	432	507
Chemistry	4,135	4,330	4,190	4,016 r	3,982	3,937	3,934	4,203
Physics	2,197	2,135	2,203	2,128 r	2,200	2,203	2,323	2,510
Physical sciences, nec	161	216	199	168	160	160	183	204
Psychology	959	898	881	866 r	1,097	1,079	1,070	1,209
Clinical psychology	72	67	64	62	72	72	65	130
Psychology, general	633	594	576	530 r	693	684	731	754
Psychology, nec	254	237	241	274	332	323	274	325
Social sciences	402	365 r	371	391	494	482	506	560
Agricultural economics	25	34	40	36	48	44	45	43
Anthropology (cultural/social)	57	54 r	65	61	80	80	88	77
Economics (except agricultural)	36	20	13	16	33	37	35	65
Geography	29	31	42	62	39	39	39	58
History and philosophy of science	14	6	9	8	13	9	9	9
Linguistics	29	29	24	25	26	20	21	14

TABLE 69. Postdoctoral appointees in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Political science	51	44	42	60	44	44	55	76
Sociology	74	64 r	53	37	60	53	42	59
Sociology/anthropology	2	13	10	6	1	1	2	3
Social sciences, nec	85	70	73	80	150	155	170	156
Engineering	3,810	3,947	4,164	4,639 r	4,903	4,937	5,457	6,411
Aerospace engineering	141	141	153	165	178	178	154	168
Agricultural engineering	85	79	89	116	139	139	135	110
Architecture ^a	na	na	na	na	na	5	11	22
Biomedical engineering	388	425	477	591	640	640	710	960
Chemical engineering	686	689	702	735 r	758	790	880	1,084
Civil engineering ^a	300	313	384	458 r	417	415	465	535
Electrical engineering	646	654	689	721 r	885	884	986	1,023
Engineering science	180	180	168	224	192	183	214	226
Industrial engineering	45	50	51	51	73	71	115	109
Mechanical engineering	543	514	562	643 r	723	720	782	945
Metallurgical/materials engineering	539	567	578	571 r	555	564	605	758
Mining engineering	12	9	8	11	4	5	5	4
Nuclear engineering	49	67	41	85	77	73	85	90
Petroleum engineering	17	14	13	18	22	22	28	36
Engineering, nec	179	245	249	250	240	248	282	341
Health	13,061	13,174 r	14,096	14,452 r	14,814	14,613	15,952	16,997
Clinical medicine	11,445	11,477 r	12,323	12,583	12,804	12,471	13,837	14,601
Anesthesiology	268	274	301	335	334	334	395	435
Cardiology	422	364	403	420	394	432	515	532
Endocrinology	254	262	270	287	299	313	334	475
Gastroenterology	246	235	230	247	245	245	236	269
Hematology	262	278	235	243	293	293	344	429
Neurology ^a	1,311	1,445 r	1,481	1,565	1,614	1,304	1,363	1,418
Obstetrics/gynecology	395	358	347	334	182	182	228	279
Oncology/cancer research	813	876 r	977	1,156	1,432	1,508	1,571	1,681
Ophthalmology	352	384 r	372	340	375	371	466	462
Otorhinolaryngology	124	146	149	155	125	125	137	137
Pediatrics	950	905	980	937	901	901	985	1,003
Preventive medicine/community health	299	291	287	275	341	350	379	395
Psychiatry	867	811	855	812	855	791	888	918
Pulmonary disease	209	170	154	136	198	198	237	251
Radiology	578	609 r	630	837	885	841	845	977
Surgery	1,173	1,142 r	1,189	1,135	1,243	1,209	1,249	1,342
Clinical medicine, nec	2,922	2,927	3,463	3,369	3,088	3,074	3,665	3,598
Other health	1,616	1,697 r	1,773	1,869 r	2,010	2,142	2,115	2,396
Dental sciences	173	143 r	169	192	206	272	270	291
Nursing	68	78 r	55	58	62	62	88	70
Pharmaceutical sciences	630	723	742	718 r	756	798	804	974

TABLE 69. Postdoctoral appointees in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	50	37	40	52	84	84	59	58
Veterinary sciences	387	383	432	452	420	498	486	470
Other health, nec	308	333	335	397	482	428	408	533

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007. r = data significantly revised; replace originally published data.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 70. Postdoctoral appointees in science, engineering, and health fields in doctorate-granting institutions, by detailed field, primary source of support, and citizenship: 2009

Field	Postdoctoral appointees	Primary support				Citizenship	
		Federal		Research grants		Nonfederal	U.S. citizens and permanent residents
		Total	Fellowships	Grants	Traineeships		
All surveyed fields	57,714	35,462	2,405	29,613	3,444	22,252	27,056
Science and engineering	40,717	25,925	1,655	22,639	1,631	14,792	18,128
Science	34,306	22,203	1,493	19,149	1,561	12,103	15,757
Agricultural sciences	1,080	597	27	568	2	483	573
Biological sciences	20,125	13,097	908	10,915	1,274	7,028	9,132
Anatomy	371	259	22	205	32	112	175
Biochemistry	2,348	1,508	74	1,329	105	840	923
Biology	2,423	1,587	121	1,405	61	836	1,172
Biometry/epidemiology	395	286	19	168	99	109	243
Biophysics	180	120	14	99	7	60	86
Botany	640	389	7	381	1	251	237
Cell biology	2,632	1,604	140	1,364	100	1,028	1,159
Ecology	233	153	10	135	8	80	150
Entomology/parasitology	248	151	1	121	29	97	146
Genetics	1,054	696	57	572	67	358	496
Microbiology/immunology/virology	2,259	1,610	118	1,291	201	649	1,071
Nutrition	214	139	8	117	14	75	112
Pathology	1,791	1,130	64	900	166	661	832
Pharmacology	1,523	1,095	87	893	115	428	669
Physiology	1,427	963	66	768	129	464	610
Zoology	78	44	1	41	2	34	57
Biological sciences, nec	2,309	1,363	99	1,126	138	946	994
Communication	38	10	0	10	0	28	28
Computer sciences	591	389	31	354	4	202	269
Earth, atmospheric, and ocean sciences	1,420	896	50	820	26	524	712
Atmospheric sciences	124	91	0	91	0	33	50
Geosciences	535	334	21	313	0	201	258
Oceanography	409	198	24	168	6	211	226
Earth/atmospheric/ocean sciences, nec	352	273	5	248	20	79	178
Family and consumer sciences/ human sciences	22	8	0	8	0	14	15
Mathematical sciences	737	364	53	257	54	373	383
Mathematics/applied mathematics	675	317	52	215	50	358	363
Statistics	62	47	1	42	4	15	20
Multidisciplinary/interdisciplinary studies	458	264	15	218	31	194	236
Neuroscience	642	444	49	363	32	198	338
Physical sciences	7,424	5,159	224	4,910	25	2,265	2,822
Astronomy	507	373	37	336	0	134	258
Chemistry	4,203	2,801	144	2,634	23	1,402	1,480
Physics	2,510	1,823	42	1,779	2	687	976
Physical sciences, nec	204	162	1	161	0	42	108
Psychology	1,209	821	113	602	106	388	884
Clinical psychology	130	116	27	49	40	14	121
Psychology, general	754	497	48	399	50	257	544
Psychology, nec	325	208	38	154	16	117	219
Social sciences	560	154	23	124	7	406	365
Agricultural economics	43	21	0	21	0	22	26
Anthropology (cultural/social)	77	24	4	20	0	53	49
							28

TABLE 70. Postdoctoral appointees in science, engineering, and health fields in doctorate-granting institutions, by detailed field, primary source of support, and citizenship: 2009

Field	Postdoctoral appointees	Primary support					Citizenship	
		Federal			U.S. citizens		and permanent residents	Temporary visa holders
		Total	Fellowships	Research grants	Traineeships	Nonfederal		
Economics (except agricultural)	65	3	1	2	0	62	36	29
Geography	58	33	2	31	0	25	43	15
History and philosophy of science	9	3	0	3	0	6	3	6
Linguistics	14	1	0	1	0	13	7	7
Political science	76	12	2	9	1	64	55	21
Sociology	59	23	11	11	1	36	48	11
Sociology/anthropology	3	0	0	0	0	3	3	0
Social sciences, nec	156	34	3	26	5	122	95	61
Engineering	6,411	3,722	162	3,490	70	2,689	2,371	4,040
Aerospace engineering	168	107	0	107	0	61	69	99
Agricultural engineering	110	48	5	43	0	62	32	78
Architecture	22	8	0	8	0	14	13	9
Biomedical engineering	960	679	45	588	46	281	451	509
Chemical engineering	1,084	585	17	564	4	499	408	676
Civil engineering	535	260	9	251	0	275	212	323
Electrical engineering	1,023	584	25	559	0	439	321	702
Engineering science	226	151	6	145	0	75	112	114
Industrial engineering	109	56	1	51	4	53	50	59
Mechanical engineering	945	533	36	494	3	412	279	666
Metallurgical/materials engineering	758	429	3	425	1	329	243	515
Mining engineering	4	2	1	1	0	2	1	3
Nuclear engineering	90	63	3	60	0	27	35	55
Petroleum engineering	36	6	0	6	0	30	12	24
Engineering, nec	341	211	11	188	12	130	133	208
Health	16,997	9,537	750	6,974	1,813	7,460	8,928	8,069
Clinical medicine	14,601	8,107	667	5,809	1,631	6,494	7,725	6,876
Anesthesiology	435	260	14	220	26	175	237	198
Cardiology	532	254	21	161	72	278	214	318
Endocrinology	475	248	28	155	65	227	191	284
Gastroenterology	269	170	3	113	54	99	114	155
Hematology	429	276	44	202	30	153	186	243
Neurology	1,418	705	32	572	101	713	725	693
Obstetrics/gynecology	279	122	4	100	18	157	156	123
Oncology/cancer research	1,681	991	65	777	149	690	672	1,009
Ophthalmology	462	220	12	188	20	242	175	287
Otorhinolaryngology	137	107	11	71	25	30	83	54
Pediatrics	1,003	556	74	379	103	447	598	405
Preventive medicine/community health	395	289	44	189	56	106	273	122
Psychiatry	918	612	57	339	216	306	676	242
Pulmonary disease	251	164	37	63	64	87	163	88
Radiology	977	561	37	461	63	416	439	538
Surgery	1,342	572	19	443	110	770	617	725
Clinical medicine, nec	3,598	2,000	165	1,376	459	1,598	2,206	1,392
Other health	2,396	1,430	83	1,165	182	966	1,203	1,193
Dental sciences	291	224	8	170	46	67	120	171
Nursing	70	51	20	9	22	19	57	13
Pharmaceutical sciences	974	561	26	493	42	413	399	575

TABLE 70. Postdoctoral appointees in science, engineering, and health fields in doctorate-granting institutions, by detailed field, primary source of support, and citizenship: 2009

Field	Postdoctoral appointees	Primary support					Citizenship	
		Federal			Research grants		U.S. citizens and permanent residents	Temporary visa holders
		Total	Fellowships	Traineeships	Nonfederal			
Speech pathology/audiology	58	49	0	45	4	9	34	24
Veterinary sciences	470	231	15	204	12	239	298	172
Other health, nec	533	314	14	244	56	219	295	238

nec = not elsewhere classified.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 71. Doctorate-granting institutions ranked by number of postdoctoral appointees, by field: 2009

Rank	Institution	All appointees	Science and engineering			Health
			Total	Science	Engineering	
-	All institutions	57,714	40,717	34,306	6,411	16,997
1	Harvard U.	5,594	2,116	2,058	58	3,478
2	Stanford U.	1,590	950	766	184	640
3	Johns Hopkins U., The	1,570	627	515	112	943
4	U. CA, Berkeley	1,361	1,249	877	372	112
5	U. CA, San Francisco	1,320	817	817	0	503
6	Yale U.	1,195	808	765	43	387
7	MA Institute of Technology	1,193	1,164	686	478	29
8	U. CA, Los Angeles	1,141	783	668	115	358
9	U. CA, San Diego	1,135	754	673	81	381
10	U. MI all campuses	1,067	709	547	162	358
11	U. WA	1,024	692	575	117	332
12	U. PA	1,003	668	574	94	335
13	U. MN all campuses	863	618	502	116	245
14	U. Pittsburgh all campuses	831	429	342	87	402
15	U. WI Madison	786	568	485	83	218
16	U. CO all campuses	782	695	637	58	87
17	Duke U.	765	473	409	64	292
18	Northwestern U.	758	592	416	176	166
19	Columbia U. in the City of NY	757	549	491	58	208
20	U. NC Chapel Hill	746	410	408	2	336
21	U. CA, Davis	692	543	453	90	149
22	Emory U.	644	368	342	26	276
23	Washington U. St. Louis	637	318	279	39	319
24	U. FL	597	428	362	66	169
25	CA Institute of Technology	582	582	452	130	0
26	Cornell U. all campuses	581	391	274	117	190
27	Vanderbilt U.	579	401	379	22	178
28	U. TX Southwestern Medical Ctr. Dallas	564	345	345	0	219
29	OH State U. all campuses	552	331	250	81	221
30	U. TX M. D. Anderson Cancer Ctr.	548	231	231	0	317
31	U. Chicago	531	352	352	0	179
32	U. IL Urbana-Champaign	506	492	384	108	14
33	PA State U. all campuses	493	444	332	112	49
34	U. NM all campuses	480	381	247	134	99
35	Baylor C. of Medicine	464	285	285	0	179
36	Mayo Graduate School	428	131	131	0	297
37	NY U.	424	424	424	0	0
38	MI State U.	422	401	340	61	21
39	U. Southern CA	418	265	212	53	153
40	Princeton U.	415	415	320	95	0
41	U. CA, Irvine	408	336	303	33	72
42	IN U. all campuses	407	275	261	14	132
43	U. VA all campuses	400	286	254	32	114
44	Mt. Sinai School of Medicine	386	386	386	0	0
45	U. UT	370	337	283	54	33
46	Boston U.	360	328	248	80	32
47	U. MA Worcester	357	248	248	0	109
48	U. IA	354	143	136	7	211
49	U. TX Medical Branch	342	210	206	4	132
50	LA State U. all campuses	339	284	267	17	55
51	Purdue U. all campuses	339	299	201	98	40

TABLE 71. Doctorate-granting institutions ranked by number of postdoctoral appointees, by field: 2009

Rank	Institution	All appointees	Science and engineering			Health
			Total	Science	Engineering	
52	U. Rochester	335	207	193	14	128
53	Yeshiva U.	334	238	238	0	96
54	Rockefeller U.	333	272	272	0	61
55	U. MD College Park	325	318	223	95	7
56	TX A&M U. all campuses	324	285	240	45	39
57	U. AZ	322	297	270	27	25
58	U. KY all campuses	305	209	171	38	96
59	OR Health & Science U.	301	195	173	22	106
60	SUNY Buffalo all campuses	275	222	206	16	53
61	GA Institute of Technology all campuses	271	271	100	171	0
62	U. Cincinnati all campuses	268	92	74	18	176
63	NC State U.	264	186	140	46	78
64	U. South FL	261	132	113	19	129
65	U. TX Austin	259	236	141	95	23
66	FL State U.	258	255	219	36	3
67	U. AL Birmingham, The	253	137	132	5	116
68	U. KS all campuses	253	163	145	18	90
69	IA State U.	246	228	138	90	18
70	Rutgers, The State U. NJ all campuses	245	231	194	37	14
71	U. IL Chicago	245	134	124	10	111
72	U. Miami	240	128	125	3	112
73	VA Commonwealth U.	233	143	132	11	90
74	U. GA	232	216	216	0	16
75	CO State U.	227	203	181	22	24
76	U. CA, Riverside	227	217	186	31	10
77	Brown U.	226	206	182	24	20
78	U. TX Health Science Ctr. Houston	224	0	0	0	224
79	U. CT all campuses	219	141	119	22	78
80	Case Western Reserve U.	218	182	148	34	36
81	VA Polytechnic Institute and State U.	215	210	147	63	5
82	U. MA Amherst	209	206	151	55	3
83	U. HI Manoa	207	201	181	20	6
84	AZ State U. main campus	202	200	162	38	2
85	Medical U. SC	198	122	118	4	76
86	U. OK all campuses	197	137	114	23	60
87	Dartmouth C.	188	162	119	43	26
88	Wake Forest U.	187	72	72	0	115
89	U. Houston	185	183	157	26	2
90	U. MO-Columbia	178	143	127	16	35
91	Carnegie Mellon U.	177	177	137	40	0
92	SUNY Stony Brook all campuses	168	152	136	16	16
93	U. CA, Santa Barbara	166	166	84	82	0
94	WA State U.	161	138	114	24	23
95	U. TN Knoxville	156	156	121	35	0
96	U. CA, Santa Cruz	154	154	145	9	0
97	IL Institute of Technology	153	153	130	23	0
98	Temple U.	153	106	100	6	47
99	Rice U.	151	151	104	47	0
100	Thomas Jefferson U.	144	88	88	0	56
101	U. NE Lincoln	143	135	113	22	8
102	Georgetown U.	140	70	70	0	70
103	U. TX Health Science Ctr. San Antonio	133	71	71	0	62

TABLE 71. Doctorate-granting institutions ranked by number of postdoctoral appointees, by field: 2009

Rank	Institution	All appointees	Science and engineering			Health
			Total	Science	Engineering	
104	Brandeis U.	132	132	132	0	0
105	Wayne State U.	128	83	69	14	45
106	TX Tech U.	122	104	76	28	18
107	U. DE	121	115	58	57	6
108	Tufts U.	120	116	75	41	4
109	U. of Medicine and Dentistry NJ	120	83	83	0	37
110	Medical C. GA	117	113	113	0	4
111	U. Louisville	117	58	52	6	59
112	U. SC all campuses	116	91	49	42	25
113	U. NE Medical Ctr.	115	49	49	0	66
114	U. of Notre Dame	114	114	83	31	0
115	SUNY Albany	103	95	85	10	8
116	KS State U.	95	95	90	5	0
117	Rensselaer Polytechnic Institute	94	94	60	34	0
118	U. TX Arlington	88	88	54	34	0
119	U. WI Milwaukee	87	84	66	18	3
120	TX A&M U. System Health Science Ctr.	83	81	81	0	2
121	Auburn U. all campuses	82	75	61	14	7
122	U. NV, Reno	81	80	75	5	1
123	Medical C. WI	79	49	49	0	30
124	U. TX Dallas	79	72	40	32	7
125	CUNY The City C.	78	78	48	30	0
126	Northeastern U.	77	59	51	8	18
127	U. VT	77	64	64	0	13
128	U. Central FL	74	74	30	44	0
129	Woods Hole Oceanographic Institution	74	74	65	9	0
130	WV U.	73	70	49	21	3
131	U. OR	72	72	72	0	0
132	Drexel U.	71	71	51	20	0
133	MT State U. Bozeman	71	54	48	6	17
134	U. AR main campus	70	70	61	9	0
135	OR State U.	69	60	56	4	9
136	U. WY	69	69	58	11	0
137	GA State U.	63	63	63	0	0
138	Tulane U.	63	63	59	4	0
139	OK State U. all campuses	61	56	50	6	5
140	MS State U.	60	56	30	26	4
141	Rush U.	58	21	21	0	37
142	U. MD Baltimore County	56	56	55	1	0
143	Loyola U. Chicago	54	41	41	0	13
144	Albany Medical C.	53	53	53	0	0
145	U. MD Baltimore	52	8	8	0	44
146	ND State U. all campuses	51	50	47	3	1
147	Syracuse U. all campuses	51	51	41	10	0
148	U. TX San Antonio	51	51	42	9	0
149	U. ID	50	50	45	5	0
150	Clemson U.	49	49	40	9	0
151	San Diego State U.	47	41	34	7	6
152	Boston C.	46	46	46	0	0
153	U. North TX	46	46	38	8	0
154	CO School of Mines	43	43	18	25	0
155	FL International U.	43	41	33	8	2

TABLE 71. Doctorate-granting institutions ranked by number of postdoctoral appointees, by field: 2009

Rank	Institution	All appointees	Science and engineering			Health
			Total	Science	Engineering	
156	Lehigh U.	43	43	25	18	0
157	U. RI	40	38	33	5	2
158	CUNY Hunter C.	39	39	39	0	0
159	U. Akron all campuses	38	38	20	18	0
160	U. Southern MS	38	38	38	0	0
161	Baylor U.	37	36	35	1	1
162	George Mason U.	37	37	36	1	0
163	Bowling Green State U. all campuses	36	36	36	0	0
164	U. PR Rio Piedras Campus	35	35	35	0	0
165	FL A&M U.	33	22	22	0	11
166	NC Agricultural and Technical State U.	33	33	15	18	0
167	Kent State U. all campuses	32	32	32	0	0
168	SD State U.	32	26	21	5	6
169	Miami U. all campuses	31	31	31	0	0
170	U. North TX Health Science Ctr. Ft. Worth	31	0	0	0	31
171	Creighton U.	30	23	23	0	7
172	U. NH	30	30	30	0	0
173	Meharry Medical C.	29	29	29	0	0
174	U. MO-Kansas City	29	16	13	3	13
175	UT State U.	29	29	17	12	0
176	C. of William and Mary all campuses	28	28	24	4	0
177	Old Dominion U.	28	25	18	7	3
178	Portland State U.	28	28	27	1	0
179	Rosalind Franklin U. of Medicine and Science	28	24	24	0	4
180	Southern Methodist U.	28	28	20	8	0
181	SUNY Binghamton	28	28	27	1	0
182	U. AR for Medical Sciences	28	27	27	0	1
183	Jackson State U.	27	27	27	0	0
184	U. NV, Las Vegas	26	25	21	4	1
185	Stevens Institute of Technology	25	25	9	16	0
186	Clarkson U.	24	24	9	15	0
187	East Carolina U.	24	22	22	0	2
188	St. Louis U. all campuses	24	24	22	2	0
189	U. AL, The	24	24	18	6	0
190	U. Memphis, The	24	24	19	5	0
191	Rochester Institute of Technology	22	22	18	4	0
192	U. MS all campuses	22	15	15	0	7
193	U. MT-Missoula, The	22	17	17	0	5
194	CUNY Graduate Ctr.	21	21	21	0	0
195	Polytechnic U.	21	21	3	18	0
196	Howard U.	20	19	19	0	1
197	U. ME	20	20	15	5	0
198	Marquette U.	19	18	10	8	1
199	U. AL Huntsville, The	19	19	17	2	0
200	U. South AL	19	19	17	2	0
201	Wright State U. all campuses	19	19	11	8	0
202	George Washington U.	18	18	18	0	0
203	Oakland U.	18	18	15	3	0
204	OH U. all campuses	18	17	13	4	1
205	SUNY Upstate Medical U.	18	18	18	0	0
206	U. SD	18	18	16	2	0
207	Eastern VA Medical School	17	8	8	0	9

TABLE 71. Doctorate-granting institutions ranked by number of postdoctoral appointees, by field: 2009

Rank	Institution	All appointees	Science and engineering			Health
			Total	Science	Engineering	
208	NJ Institute of Technology	17	17	7	10	0
209	Northern AZ U.	15	15	15	0	0
210	Catholic U. America, The	14	14	13	1	0
211	Loma Linda U.	14	4	4	0	10
212	NM State U. all campuses	14	14	9	5	0
213	CUNY Queens C.	13	13	13	0	0
214	Marshall U.	13	13	13	0	0
215	MO U. of Science & Technology	13	13	5	8	0
216	U. MO-St. Louis	13	13	13	0	0
217	U. ND all campuses	13	13	12	1	0
218	Worcester Polytechnic Institute	13	13	4	9	0
219	SUNY C. of Optometry	12	12	12	0	0
220	U. Denver	12	12	11	1	0
221	U. NC Charlotte	12	12	12	0	0
222	Southern IL U. Carbondale	11	11	7	4	0
223	SUNY C. of Environmental Science and Forestry	11	11	6	5	0
224	Duquesne U.	10	8	8	0	2
225	FL Institute of Technology	10	10	10	0	0
226	TX State U. San Marcos	10	10	10	0	0
227	U. LA Lafayette	10	10	3	7	0
228	U. MA Dartmouth	10	10	8	2	0
229	Fordham U.	9	9	9	0	0
230	Teachers C. Columbia U.	9	0	0	0	9
231	Uniformed Services U. of the Health Sciences	9	6	6	0	3
232	Boise State U.	8	7	3	4	1
233	DE State U.	8	8	8	0	0
234	U. AR Little Rock	8	8	8	0	0
235	Wesleyan U.	8	8	8	0	0
236	Central MI U.	7	7	6	1	0
237	East TN State U.	7	7	7	0	0
238	IL State U.	7	7	7	0	0
239	Tuskegee U.	7	3	0	3	4
240	U. Dayton	7	7	4	3	0
241	Cleveland State U.	6	6	5	1	0
242	FL Atlantic U.	6	6	6	0	0
243	Hampton U.	6	6	6	0	0
244	Mercer U. all campuses	6	5	5	0	1
245	Morgan State U.	6	0	0	0	6
246	Northern IL U.	6	6	6	0	0
247	U. Tulsa	6	6	1	5	0
248	Antioch U. all campuses	5	5	5	0	0
249	Clark Atlanta U.	5	5	5	0	0
250	MI Technological U.	5	5	4	1	0
251	Wichita State U.	5	5	2	3	0
252	Western MI U.	4	4	3	1	0
253	Nova Southeastern U.	3	3	3	0	0
254	Seton Hall U.	3	3	3	0	0
255	Southwest MO State U.	3	3	3	0	0
256	TX A&M U. Commerce	3	3	3	0	0
257	U. NC Wilmington	3	3	3	0	0
258	American U.	2	2	2	0	0
259	Clark U.	2	2	2	0	0
260	Sam Houston State U.	2	2	2	0	0

TABLE 71. Doctorate-granting institutions ranked by number of postdoctoral appointees, by field: 2009

Rank	Institution	All appointees	Science and engineering			Health
			Total	Science	Engineering	
261	AL State U.	1	1	1	0	0
262	Azusa Pacific U.	1	1	1	0	0
263	Hofstra U.	1	1	1	0	0
264	IN State U. all campuses	1	1	1	0	0
265	Middle TN State U.	1	1	1	0	0
266	Montclair State U.	1	0	0	0	1
267	SD School of Mines and Technology	1	1	1	0	0
268	TN State U.	1	1	0	1	0
269	TX Woman's U.	1	1	1	0	0
270	U. MD Eastern Shore	1	1	1	0	0
271	U. Northern IA	1	1	1	0	0
272	U. TN Health Science Ctr.	1	1	0	1	0
273	West TX A&M U.	1	1	1	0	0

NOTE: Tied institutions are ranked alphabetically.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 72. Nonfaculty research staff with doctorates in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
All surveyed fields	8,471 r	9,062 r	9,520 r	10,803 r	10,730	10,746	13,730	14,029
Science and engineering	6,443 r	6,910 r	7,008 r	7,767 r	7,809	7,830	10,075	10,406
Science	5,491 r	5,867 r	6,062 r	6,651 r	6,511	6,520	8,657	8,670
Agricultural sciences	254	301	287	305	256	264	457	430
Biological sciences	2,859	2,972	2,992	3,351 r	3,254	3,202	4,513	4,207
Anatomy	82	70	76	114	103	73	106	75
Biochemistry	480	488	519	507	499	493	678	520
Biology	358	351	332	501 r	379	363	392	431
Biometry/epidemiology	117	129	133	141	176	187	209	177
Biophysics	51	26	33	67	36	35	36	15
Botany	93	89	79	76	148	148	144	154
Cell biology	323	328	297	219	240	270	373	448
Ecology	24	22	15	24	37	36	60	66
Entomology/parasitology	32	34	32	47	28	28	60	50
Genetics	110	118	138	172	181	181	377	254
Microbiology/immunology/virology	346	311	298	319	331	312	563	562
Nutrition	36	85	69	70	49	41	75	66
Pathology	215	219	270	289	306	296	294	309
Pharmacology	225	275	325	334	361	361	383	374
Physiology	180	256	196	235	190	208	323	339
Zoology	29	11	23	33	17	16	22	17
Biological sciences, nec	158	160	157	203	173	154	418	350
Communication ^a	ne	ne	ne	ne	ne	4	6	7
Computer sciences	127	170	152	183 r	195	179	228	325
Earth, atmospheric, and ocean sciences	602 r	586 r	582 r	636 r	612	609	751	772
Atmospheric sciences	161 r	173 r	201 r	204	167	167	158	190
Geosciences	223 r	209 r	192 r	251 r	231	228	291	311
Oceanography	163	146	142	103	138	138	188	178
Earth/atmospheric/ocean sciences, nec	55	58	47	78	76	76	114	93
Family and consumer sciences/ human sciences ^a	ne	ne	ne	ne	ne	8	8	31
Mathematical sciences	47	69	64	89 r	108	108	91	160
Mathematics/applied mathematics	35	64	57	80 r	106	106	86	153
Statistics	12	5	7	9	2	2	5	7
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	28	219	231
Neuroscience ^a	na	na	na	na	na	14	23	77
Physical sciences	1,244	1,366	1,572	1,614 r	1,641	1,668	1,816	1,763
Astronomy	144	213	161	190	278	307	340	352
Chemistry	572	593	779	769 r	716	713	743	759
Physics	487	535	603	614 r	609	609	710	608
Physical sciences, nec	41	25	29	41	38	39	23	44
Psychology	240	249	256	261 r	277	268	297	290
Clinical psychology	42	39	9	16	20	20	22	32
Psychology, general	88	95	122	129 r	121	119	153	104
Psychology, nec	110	115	125	116	136	129	122	154
Social sciences	118 r	154 r	157 r	212 r	168	168	248	377
Agricultural economics	13	10	13	15	15	15	43	31
Anthropology (cultural/social)	30 r	15 r	17 r	30 r	20	20	33	75
Economics (except agricultural)	4	4	2	8 r	12	12	25	30
Geography	7	14	18	11	9	9	10	35
History and philosophy of science	2	16	5	8	6	6	3	8

TABLE 72. Nonfaculty research staff with doctorates in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Linguistics	3	2	7	9	4	4	7	10
Political science	14	19	10	36	20	20	30	37
Sociology	15	18	21	25	16	12	19	16
Sociology/anthropology	0	0	3	0	2	2	1	3
Social sciences, nec	30	56	61	70	64	68	77	132
Engineering	952 r	1,043 r	946 r	1,116 r	1,298	1,310	1,418	1,736
Aerospace engineering	30	60	54	66	29	29	41	40
Agricultural engineering	25	28	22	33	29	29	57	52
Architecture ^a	na	na	na	na	na	0	5	6
Biomedical engineering	49	67	58	65	91	91	89	153
Chemical engineering	96	92	66	144 r	131	139	173	224
Civil engineering ^a	98	111	113	134 r	141	143	161	180
Electrical engineering	172	175	178	158 r	304	310	283	296
Engineering science	78	69	61	72	81	81	78	124
Industrial engineering	11	26	24	41 r	32	27	67	76
Mechanical engineering	125	175	165	168 r	199	199	193	246
Metallurgical/materials engineering	146	174	127	142 r	149	150	124	180
Mining engineering	3	5	1	2	3	3	10	1
Nuclear engineering	15	11	3	3	4	4	26	28
Petroleum engineering	4 r	9 r	23 r	24	24	24	15	17
Engineering, nec	100	41	51	64	81	81	96	113
Health	2,028	2,152 r	2,512	3,036 r	2,921	2,916	3,655	3,623
Clinical medicine	1,674	1,837	2,128	2,647	2,480	2,431	3,047	2,983
Anesthesiology	23	45	54	49	61	61	85	69
Cardiology	43	57	66	100	109	109	196	139
Endocrinology	21	20	28	49	65	73	85	94
Gastroenterology	55	56	61	66	36	36	75	59
Hematology	44	44	66	100	99	99	117	89
Neurology ^a	146	133	192	172	176	163	224	179
Obstetrics/gynecology	22	19	58	44	47	39	40	48
Oncology/cancer research	106	209	254	234	301	301	336	437
Ophthalmology	44	39	72	118	94	92	122	127
Otorhinolaryngology	8	17	20	16	26	26	34	29
Pediatrics	139	153	202	442	294	294	261	211
Preventive medicine/community health	148	144	121	120	153	158	180	185
Psychiatry	128	135	125	133	135	116	127	140
Pulmonary disease	19	23	24	65	67	67	85	50
Radiology	98	115	139	177	169	169	184	188
Surgery	210	201	243	375	254	252	251	305
Clinical medicine, nec	420	427	403	387	394	376	645	634
Other health	354	315 r	384	389 r	441	485	608	640
Dental sciences	10	14	54	40	36	38	47	55
Nursing	20	32	28	38	36	36	42	31
Pharmaceutical sciences	155	120 r	129	108 r	126	152	190	204

TABLE 72. Nonfaculty research staff with doctorates in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Speech pathology/audiology	14	15	13	20	27	27	34	53
Veterinary sciences	98	58	82	96	81	107	183	183
Other health, nec	57	76	78	87 r	135	125	112	114

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007. r = data significantly revised; replace originally published data.

nec = not elsewhere classified.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 73. Graduate students in science, engineering, and health fields in historically black colleges and universities, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						Temporary visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
All surveyed fields	6,761	15	253	4,669	122	664	190	848
Science and engineering	6,032	10	231	4,185	110	517	166	813
Science	4,966	9	161	3,635	91	372	142	556
Agricultural sciences	356	0	7	187	28	35	8	91
Biological sciences	816	4	44	589	14	51	16	98
Anatomy	9	0	1	3	2	2	0	1
Biochemistry	24	0	1	19	0	2	0	2
Biology	359	3	14	267	7	27	4	37
Biometry/epidemiology	3	0	0	0	0	0	0	3
Biophysics	0	0	0	0	0	0	0	0
Botany	0	0	0	0	0	0	0	0
Cell biology	0	0	0	0	0	0	0	0
Ecology	0	0	0	0	0	0	0	0
Entomology/parasitology	4	0	1	0	0	0	0	3
Genetics	23	0	2	17	0	2	1	1
Microbiology/immunology/virology	39	0	0	38	1	0	0	0
Nutrition	86	1	3	44	0	4	0	34
Pathology	0	0	0	0	0	0	0	0
Pharmacology	68	0	8	47	1	3	1	8
Physiology	8	0	0	7	0	0	0	1
Zoology	0	0	0	0	0	0	0	0
Biological sciences, nec	193	0	14	147	3	11	10	8
Communication	79	0	0	68	0	0	4	7
Computer sciences	381	0	47	184	7	12	6	125
Earth, atmospheric, and ocean sciences	100	0	1	49	7	18	0	25
Atmospheric sciences	26	0	0	11	7	6	0	2
Geosciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Earth/atmospheric/ocean sciences, nec	74	0	1	38	0	12	0	23
Family and consumer sciences/ human sciences	138	1	1	118	0	14	2	2
Mathematical sciences	180	0	8	127	5	18	3	19
Mathematics/applied mathematics	180	0	8	127	5	18	3	19
Statistics	0	0	0	0	0	0	0	0
Multidisciplinary/interdisciplinary studies	35	0	1	19	0	4	2	9
Neuroscience	18	0	0	18	0	0	0	0
Physical sciences	345	1	16	209	7	20	9	83
Astronomy	0	0	0	0	0	0	0	0
Chemistry	209	1	3	134	2	6	4	59
Physics	136	0	13	75	5	14	5	24
Physical sciences, nec	0	0	0	0	0	0	0	0
Psychology	551	2	7	423	6	87	16	10
Clinical psychology	43	0	2	36	0	2	0	3
Psychology, general	335	1	3	229	5	77	16	4
Psychology, nec	173	1	2	158	1	8	0	3
Social sciences	1,967	1	29	1,644	17	113	76	87
Agricultural economics	19	0	2	11	0	3	0	3
Anthropology (cultural/social)	0	0	0	0	0	0	0	0
Economics (except agricultural)	50	0	1	22	0	0	9	18

TABLE 73. Graduate students in science, engineering, and health fields in historically black colleges and universities, by detailed field, citizenship, and race/ethnicity of U.S. citizens and permanent residents: 2009

Field	Total	U.S. citizens and permanent residents						Temporary visa holders
		American Indian/ Alaska Native	Asian/Pacific Islander	Black, non- Hispanic	Hispanic	White, non- Hispanic	Other or unknown	
Geography	0	0	0	0	0	0	0	0
History and philosophy of science	7	0	0	6	0	1	0	0
Linguistics	0	0	0	0	0	0	0	0
Political science	208	0	2	193	1	5	1	6
Sociology	909	1	17	726	5	60	61	39
Sociology/anthropology	53	0	0	43	0	5	0	5
Social sciences, nec	721	0	7	643	11	39	5	16
Engineering	1,066	1	70	550	19	145	24	257
Aerospace engineering	0	0	0	0	0	0	0	0
Agricultural engineering	0	0	0	0	0	0	0	0
Architecture	174	0	3	115	6	36	3	11
Biomedical engineering	1	0	0	1	0	0	0	0
Chemical engineering	33	0	1	11	0	0	0	21
Civil engineering	172	0	24	75	4	41	8	20
Electrical engineering	202	0	10	77	1	22	6	86
Engineering science	0	0	0	0	0	0	0	0
Industrial engineering	88	0	9	67	3	7	0	2
Mechanical engineering	93	0	0	42	0	2	4	45
Metallurgical/materials engineering	10	0	0	4	0	2	1	3
Mining engineering	0	0	0	0	0	0	0	0
Nuclear engineering	0	0	0	0	0	0	0	0
Petroleum engineering	0	0	0	0	0	0	0	0
Engineering, nec	293	1	23	158	5	35	2	69
Health	729	5	22	484	12	147	24	35
Clinical medicine	256	2	5	223	2	8	6	10
Anesthesiology	0	0	0	0	0	0	0	0
Cardiology	0	0	0	0	0	0	0	0
Endocrinology	0	0	0	0	0	0	0	0
Gastroenterology	0	0	0	0	0	0	0	0
Hematology	0	0	0	0	0	0	0	0
Neurology	0	0	0	0	0	0	0	0
Obstetrics/gynecology	0	0	0	0	0	0	0	0
Oncology/cancer research	0	0	0	0	0	0	0	0
Ophthalmology	0	0	0	0	0	0	0	0
Otorhinolaryngology	0	0	0	0	0	0	0	0
Pediatrics	0	0	0	0	0	0	0	0
Preventive medicine/community health	178	0	3	159	2	7	2	5
Psychiatry	0	0	0	0	0	0	0	0
Pulmonary disease	0	0	0	0	0	0	0	0
Radiology	0	0	0	0	0	0	0	0
Surgery	0	0	0	0	0	0	0	0
Clinical medicine, nec	78	2	2	64	0	1	4	5
Other health	473	3	17	261	10	139	18	25
Dental sciences	0	0	0	0	0	0	0	0
Nursing	69	1	0	52	0	7	3	6
Pharmaceutical sciences	93	0	14	55	1	6	2	15
Speech pathology/audiology	276	2	3	128	8	121	11	3
Veterinary sciences	20	0	0	15	0	2	2	1
Other health, nec	15	0	0	11	1	3	0	0

nec = not elsewhere classified.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2009.

TABLE 74. Black, non-Hispanic U.S. citizen and permanent resident graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Black students in all institutions	31,242	32,496	33,547	34,866	34,934	35,923	37,047	37,349
Science and engineering	24,174	24,624	25,248	25,664	26,565	27,637	28,680	29,973
Science	20,962	21,225	21,778	22,092	22,881	23,862	24,694	25,801
Agricultural sciences	460	394	417	453	431	434	470	406
Biological sciences	2,757	2,902	2,991	3,071	3,303	3,320	3,394	3,575
Communication ^a	ne	ne	ne	ne	ne	516	644	688
Computer sciences	1,951	1,799	1,761	1,774	1,865	1,834	1,889	2,088
Earth, atmospheric, and ocean sciences	270	261	262	263	279	272	301	311
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	322	397	538
Mathematical sciences	655	696	720	711	711	708	681	730
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	320	388	480
Neuroscience ^a	na	na	na	na	na	61	67	88
Physical sciences	939	993	1,006	1,009	984	980	1,009	979
Psychology	4,692	4,990	5,238	5,089	5,140	5,100	5,358	5,393
Social sciences	9,238	9,190	9,383	9,722	10,168	9,995	10,096	10,525
Engineering	3,212	3,399	3,470	3,572	3,684	3,775	3,986	4,172
Health ^a	7,068	7,872	8,299	9,202	8,369	8,286	8,367	7,376
Black students in HBCUs	5,129	5,071	5,337	5,283	4,481	4,615	4,478	4,669
Science and engineering	4,000	4,076	4,217	4,103	3,708	3,833	3,732	4,185
Science	3,672	3,688	3,823	3,669	3,286	3,361	3,222	3,635
Agricultural sciences	260	170	185	218	196	196	237	187
Biological sciences	573	568	539	493	475	487	497	589
Communication ^a	ne	ne	ne	ne	ne	65	74	68
Computer sciences	283	208	193	181	161	160	151	184
Earth, atmospheric, and ocean sciences	51	57	57	64	49	49	61	49
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	64	72	118
Mathematical sciences	105	100	125	135	126	126	103	127
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	19	18	19
Neuroscience ^a	na	na	na	na	na	0	0	18
Physical sciences	167	205	226	249	210	210	210	209
Psychology	891	882	912	745	576	576	467	423
Social sciences	1,342	1,498	1,586	1,584	1,493	1,409	1,332	1,644
Engineering	328	388	394	434	422	472	510	550
Health ^a	1,129	995	1,120	1,180	773	782	746	484
Percentage of black students in HBCUs	16.4	15.6	15.9	15.2	12.8	12.8	12.1	12.5
Science and engineering	16.5	16.6	16.7	16.0	14.0	13.9	13.0	14.0
Science	17.5	17.4	17.6	16.6	14.4	14.1	13.0	14.1
Agricultural sciences	56.5	43.1	44.4	48.1	45.5	45.2	50.4	46.1
Biological sciences	20.8	19.6	18.0	16.1	14.4	14.7	14.6	16.5
Communication ^a	ne	ne	ne	ne	ne	12.6	11.5	9.9
Computer sciences	14.5	11.6	11.0	10.2	8.6	8.7	8.0	8.8
Earth, atmospheric, and ocean sciences	18.9	21.8	21.8	24.3	17.6	18.0	20.3	15.8
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	19.9	18.1	21.9
Mathematical sciences	16.0	14.4	17.4	19.0	17.7	17.8	15.1	17.4
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	5.9	4.6	4.0
Neuroscience ^a	na	na	na	na	na	0.0	0.0	20.5
Physical sciences	17.8	20.6	22.5	24.7	21.3	21.4	20.8	21.3
Psychology	19.0	17.7	17.4	14.6	11.2	11.3	8.7	7.8

TABLE 74. Black, non-Hispanic U.S. citizen and permanent resident graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Social sciences	14.5	16.3	16.9	16.3	14.7	14.1	13.2	15.6
Engineering	10.2	11.4	11.4	12.2	11.5	12.5	12.8	13.2
Health ^a	16.0	12.6	13.5	12.8	9.2	9.4	8.9	6.6

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

HBCUs = historically black colleges and universities.

^aIn 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 75. Black, non-Hispanic U.S. citizen and permanent resident graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field and sex: 2005–09

Field	Male						Female					
	2005	2006	2007old ^a	2007new ^a	2008	2009	2005	2006	2007old ^a	2007new ^a	2008	2009
Black students in all institutions	11,118	11,450	11,660	11,910	12,452	12,810	22,429	23,416	23,274	24,013	24,595	24,539
Science and engineering	9,625	9,780	10,194	10,475	10,974	11,454	15,623	15,884	16,371	17,162	17,706	18,519
Science	7,255	7,337	7,721	7,954	8,271	8,597	14,523	14,755	15,160	15,908	16,423	17,204
Agricultural sciences	172	152	148	152	181	162	245	301	283	282	289	244
Biological sciences	928	948	1,042	1,049	1,093	1,119	2,063	2,123	2,261	2,271	2,301	2,456
Communication ^a	ne	ne	ne	141	208	229	ne	ne	ne	375	436	459
Computer sciences	1,047	1,052	1,161	1,139	1,181	1,289	714	722	704	695	708	799
Earth, atmospheric, and ocean sciences	110	118	124	121	140	153	152	145	155	151	161	158
Family and consumer sciences/												
human sciences ^a	ne	ne	ne	50	52	77	ne	ne	ne	272	345	461
Mathematical sciences	369	364	380	379	370	409	351	347	331	329	311	321
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	101	124	154	ne	ne	ne	219	264	326
Neuroscience ^a	na	na	na	26	31	36	na	na	na	35	36	52
Physical sciences	524	503	483	482	518	486	482	506	501	498	491	493
Psychology	947	925	942	935	1,017	953	4,291	4,164	4,198	4,165	4,341	4,440
Social sciences	3,158	3,275	3,441	3,379	3,356	3,530	6,225	6,447	6,727	6,616	6,740	6,995
Engineering	2,370	2,443	2,473	2,521	2,703	2,857	1,100	1,129	1,211	1,254	1,283	1,315
Health ^a	1,493	1,670	1,466	1,435	1,478	1,356	6,806	7,532	6,903	6,851	6,889	6,020
Black students in HBCUs	1,777	1,830	1,532	1,558	1,477	1,618	3,560	3,453	2,949	3,057	3,001	3,051
Science and engineering	1,504	1,539	1,397	1,422	1,360	1,526	2,713	2,564	2,311	2,411	2,372	2,659
Science	1,230	1,240	1,117	1,114	1,040	1,174	2,593	2,429	2,169	2,247	2,182	2,461
Agricultural sciences	76	61	54	54	79	62	109	157	142	142	158	125
Biological sciences	173	155	147	151	156	149	366	338	328	336	341	440
Communication ^a	ne	ne	ne	17	25	27	ne	ne	ne	48	49	41
Computer sciences	111	107	92	92	83	105	82	74	69	68	68	79
Earth, atmospheric, and ocean sciences	27	29	23	23	20	22	30	35	26	26	41	27
Family and consumer sciences/												
human sciences ^a	ne	ne	ne	7	6	17	ne	ne	ne	57	66	101
Mathematical sciences	60	63	66	66	50	63	65	72	60	60	53	64
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	7	8	8	ne	ne	ne	12	10	11
Neuroscience ^a	na	na	na	0	0	4	na	na	na	0	0	14
Physical sciences	116	133	101	101	109	97	110	116	109	109	101	112
Psychology	142	132	104	104	92	91	770	613	472	472	375	332
Social sciences	525	560	530	492	412	529	1,061	1,024	963	917	920	1,115
Engineering	274	299	280	308	320	352	120	135	142	164	190	198
Health ^a	273	291	135	136	117	92	847	889	638	646	629	392
Percentage of black students in HBCUs	16.0	16.0	13.1	13.1	11.9	12.6	15.9	14.7	12.7	12.7	12.2	12.4
Science and engineering	15.6	15.7	13.7	13.6	12.4	13.3	17.4	16.1	14.1	14.0	13.4	14.4
Science	17.0	16.9	14.5	14.0	12.6	13.7	17.9	16.5	14.3	14.1	13.3	14.3
Agricultural sciences	44.2	40.1	36.5	35.5	43.6	38.3	44.5	52.2	50.2	50.4	54.7	51.2
Biological sciences	18.6	16.4	14.1	14.4	14.3	13.3	17.7	15.9	14.5	14.8	14.8	17.9
Communication ^a	ne	ne	ne	12.1	12.0	11.8	ne	ne	ne	12.8	11.2	8.9
Computer sciences	10.6	10.2	7.9	8.1	7.0	8.1	11.5	10.2	9.8	9.8	9.6	9.9
Earth, atmospheric, and ocean sciences	24.5	24.6	18.5	19.0	14.3	14.4	19.7	24.1	16.8	17.2	25.5	17.1
Family and consumer sciences/												
human sciences ^a	ne	ne	ne	14.0	11.5	22.1	ne	ne	ne	21.0	19.1	21.9
Mathematical sciences	16.3	17.3	17.4	17.4	13.5	15.4	18.5	20.7	18.1	18.2	17.0	19.9
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	6.9	6.5	5.2	ne	ne	ne	5.5	3.8	3.4
Neuroscience ^a	na	na	na	0.0	0.0	11.1	na	na	na	0.0	0.0	26.9
Physical sciences	22.1	26.4	20.9	21.0	21.0	20.0	22.8	22.9	21.8	21.9	20.6	22.7

TABLE 75. Black, non-Hispanic U.S. citizen and permanent resident graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field and sex: 2005–09

Field	Male						Female					
	2005	2006	2007old ^a	2007new ^a	2008	2009	2005	2006	2007old ^a	2007new ^a	2008	2009
Psychology	15.0	14.3	11.0	11.1	9.0	9.5	17.9	14.7	11.2	11.3	8.6	7.5
Social sciences	16.6	17.1	15.4	14.6	12.3	15.0	17.0	15.9	14.3	13.9	13.6	15.9
Engineering	11.6	12.2	11.3	12.2	11.8	12.3	10.9	12.0	11.7	13.1	14.8	15.1
Health ^a	18.3	17.4	9.2	9.5	7.9	6.8	12.4	11.8	9.2	9.4	9.1	6.5

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

HBCUs = historically black colleges and universities.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 76. Black, non-Hispanic U.S. citizen and permanent resident full-time graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Black students in all institutions	17,678	18,500	18,740	19,936	19,625	20,078	21,903	22,362
Science and engineering	13,522	14,022	14,186	14,858	15,003	15,528	16,839	17,779
Science	11,687	12,062	12,217	12,718	12,834	13,308	14,556	15,407
Agricultural sciences	346	298	310	307	283	285	311	274
Biological sciences	2,097	2,241	2,318	2,418	2,486	2,509	2,645	2,831
Communication ^a	ne	ne	ne	ne	ne	279	335	366
Computer sciences	800	788	764	738	825	813	803	914
Earth, atmospheric, and ocean sciences	195	194	170	186	196	191	207	223
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	142	155	229
Mathematical sciences	382	392	414	420	423	422	402	433
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	131	169	233
Neuroscience ^a	na	na	na	na	na	55	60	81
Physical sciences	736	802	784	785	772	770	786	800
Psychology	2,571	2,761	2,856	2,986	2,910	2,877	3,423	3,453
Social sciences	4,560	4,586	4,601	4,878	4,939	4,834	5,260	5,570
Engineering	1,835	1,960	1,969	2,140	2,169	2,220	2,283	2,372
Health ^a	4,156	4,478	4,554	5,078	4,622	4,550	5,064	4,583
Black students in HBCUs	3,152	3,263	3,287	3,416	2,840	2,895	2,851	2,974
Science and engineering	2,268	2,493	2,502	2,558	2,299	2,345	2,318	2,594
Science	2,015	2,215	2,223	2,204	1,964	1,986	1,952	2,207
Agricultural sciences	194	139	143	135	110	110	158	123
Biological sciences	427	431	390	365	364	376	391	464
Communication ^a	ne	ne	ne	ne	ne	38	28	36
Computer sciences	152	114	124	124	104	103	101	104
Earth, atmospheric, and ocean sciences	34	38	34	40	30	30	36	36
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	13	11	25
Mathematical sciences	63	61	72	85	84	84	57	78
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	13	12	13
Neuroscience ^a	na	na	na	na	na	0	0	18
Physical sciences	116	174	172	184	162	162	163	167
Psychology	308	376	401	365	345	345	304	286
Social sciences	721	882	887	906	765	712	691	857
Engineering	253	278	279	354	335	359	366	387
Health ^a	884	770	785	858	541	550	533	380
Percentage of black students in HBCUs	17.8	17.6	17.5	17.1	14.5	14.4	13.0	13.3
Science and engineering	16.8	17.8	17.6	17.2	15.3	15.1	13.8	14.6
Science	17.2	18.4	18.2	17.3	15.3	14.9	13.4	14.3
Agricultural sciences	56.1	46.6	46.1	44.0	38.9	38.6	50.8	44.9
Biological sciences	20.4	19.2	16.8	15.1	14.6	15.0	14.8	16.4
Communication ^a	ne	ne	ne	ne	ne	13.6	8.4	9.8
Computer sciences	19.0	14.5	16.2	16.8	12.6	12.7	12.6	11.4
Earth, atmospheric, and ocean sciences	17.4	19.6	20.0	21.5	15.3	15.7	17.4	16.1
Family and consumer sciences/human sciences ^a	ne	ne	ne	ne	ne	9.2	7.1	10.9
Mathematical sciences	16.5	15.6	17.4	20.2	19.9	19.9	14.2	18.0
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	ne	ne	9.9	7.1	5.6
Neuroscience ^a	na	na	na	na	na	0.0	0.0	22.2
Physical sciences	15.8	21.7	21.9	23.4	21.0	21.0	20.7	20.9
Psychology	12.0	13.6	14.0	12.2	11.9	12.0	8.9	8.3

TABLE 76. Black, non-Hispanic U.S. citizen and permanent resident full-time graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field: 2003–09

Field	2003	2004	2005	2006	2007old ^a	2007new ^a	2008	2009
Social sciences	15.8	19.2	19.3	18.6	15.5	14.7	13.1	15.4
Engineering	13.8	14.2	14.2	16.5	15.4	16.2	16.0	16.3
Health ^a	21.3	17.2	17.2	16.9	11.7	12.1	10.5	8.3

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

HBCUs = historically black colleges and universities.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 77. Black, non-Hispanic U.S. citizen and permanent resident full-time graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field and sex: 2005–09

Field	Male						Female					
	2005	2006	2007old ^a	2007new ^a	2008	2009	2005	2006	2007old ^a	2007new ^a	2008	2009
Black students in all institutions	6,399	6,768	6,776	6,895	7,384	7,632	12,341	13,168	12,849	13,183	14,519	14,730
Science and engineering	5,503	5,727	5,825	5,974	6,422	6,741	8,683	9,131	9,178	9,554	10,417	11,038
Science	4,196	4,283	4,402	4,528	4,891	5,169	8,021	8,435	8,432	8,780	9,665	10,238
Agricultural sciences	127	108	99	102	122	100	183	199	184	183	189	174
Biological sciences	710	755	789	795	851	899	1,608	1,663	1,697	1,714	1,794	1,932
Communication ^a	ne	ne	ne	76	108	126	ne	ne	ne	203	227	240
Computer sciences	468	459	535	529	521	573	296	279	290	284	282	341
Earth, atmospheric, and ocean sciences	70	77	83	81	92	107	100	109	113	110	115	116
Family and consumer sciences/												
human sciences ^a	ne	ne	ne	20	19	35	ne	ne	ne	122	136	194
Mathematical sciences	224	210	227	227	230	253	190	210	196	195	172	180
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	49	57	74	ne	ne	ne	82	112	159
Neuroscience ^a	na	na	na	23	27	32	na	na	na	32	33	49
Physical sciences	414	402	375	375	394	394	370	383	397	395	392	406
Psychology	548	576	552	548	665	639	2,308	2,410	2,358	2,329	2,758	2,814
Social sciences	1,635	1,696	1,742	1,703	1,805	1,937	2,966	3,182	3,197	3,131	3,455	3,633
Engineering	1,307	1,444	1,423	1,446	1,531	1,572	662	696	746	774	752	800
Health ^a	896	1,041	951	921	962	891	3,658	4,037	3,671	3,629	4,102	3,692
Black students in HBCUs	1,123	1,241	998	1,012	959	1,060	2,164	2,175	1,842	1,883	1,892	1,914
Science and engineering	953	1,044	903	916	870	983	1,549	1,514	1,396	1,429	1,448	1,611
Science	764	802	684	684	637	744	1,459	1,402	1,280	1,302	1,315	1,463
Agricultural sciences	58	43	33	33	55	37	85	92	77	77	103	86
Biological sciences	122	117	113	117	121	118	268	248	251	259	270	346
Communication ^a	ne	ne	ne	10	7	13	ne	ne	ne	28	21	23
Computer sciences	72	78	56	56	52	58	52	46	48	47	49	46
Earth, atmospheric, and ocean sciences	18	20	16	16	11	17	16	20	14	14	25	19
Family and consumer sciences/												
human sciences ^a	ne	ne	ne	2	1	4	ne	ne	ne	11	10	21
Mathematical sciences	37	37	45	45	35	46	35	48	39	39	22	32
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	6	5	7	ne	ne	ne	7	7	6
Neuroscience ^a	na	na	na	0	0	4	na	na	na	0	0	14
Physical sciences	94	105	76	76	80	76	78	79	86	86	83	91
Psychology	71	81	64	64	58	59	330	284	281	281	246	227
Social sciences	292	321	281	259	212	305	595	585	484	453	479	552
Engineering	189	242	219	232	233	239	90	112	116	127	133	148
Health ^a	170	197	95	96	89	77	615	661	446	454	444	303
Percentage of black students in HBCUs	17.5	18.3	14.7	14.7	13.0	13.9	17.5	16.5	14.3	14.3	13.0	13.0
Science and engineering	17.3	18.2	15.5	15.3	13.5	14.6	17.8	16.6	15.2	15.0	13.9	14.6
Science	18.2	18.7	15.5	15.1	13.0	14.4	18.2	16.6	15.2	14.8	13.6	14.3
Agricultural sciences	45.7	39.8	33.3	32.4	45.1	37.0	46.4	46.2	41.8	42.1	54.5	49.4
Biological sciences	17.2	15.5	14.3	14.7	14.2	13.1	16.7	14.9	14.8	15.1	15.1	17.9
Communication ^a	ne	ne	ne	13.2	6.5	10.3	ne	ne	ne	13.8	9.3	9.6
Computer sciences	15.4	17.0	10.5	10.6	10.0	10.1	17.6	16.5	16.6	16.5	17.4	13.5
Earth, atmospheric, and ocean sciences	25.7	26.0	19.3	19.8	12.0	15.9	16.0	18.3	12.4	12.7	21.7	16.4
Family and consumer sciences/												
human sciences ^a	ne	ne	ne	10.0	5.3	11.4	ne	ne	ne	9.0	7.4	10.8
Mathematical sciences	16.5	17.6	19.8	19.8	15.2	18.2	18.4	22.9	19.9	20.0	12.8	17.8
Multidisciplinary/interdisciplinary studies ^a	ne	ne	ne	12.2	8.8	9.5	ne	ne	ne	8.5	6.3	3.8
Neuroscience ^a	na	na	na	0.0	0.0	12.5	na	na	na	0.0	0.0	28.6
Physical sciences	22.7	26.1	20.3	20.3	20.3	19.3	21.1	20.6	21.7	21.8	21.2	22.4

TABLE 77. Black, non-Hispanic U.S. citizen and permanent resident full-time graduate students in science, engineering, and health fields in all institutions and in historically black colleges and universities, by field and sex: 2005–09

Field	Male						Female					
	2005	2006	2007old ^a	2007new ^a	2008	2009	2005	2006	2007old ^a	2007new ^a	2008	2009
Psychology	13.0	14.1	11.6	11.7	8.7	9.2	14.3	11.8	11.9	12.1	8.9	8.1
Social sciences	17.9	18.9	16.1	15.2	11.7	15.7	20.1	18.4	15.1	14.5	13.9	15.2
Engineering	14.5	16.8	15.4	16.0	15.2	15.2	13.6	16.1	15.5	16.4	17.7	18.5
Health ^a	19.0	18.9	10.0	10.4	9.3	8.6	16.8	16.4	12.1	12.5	10.8	8.2

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

HBCUs = historically black colleges and universities.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix A. Technical Notes

During the production of this report the America COMPETES Reauthorization Act of 2010 was signed into law. Section 505 of the bill renames the Division of Science Resources Statistics as the National Center for Science and Engineering Statistics (NCSES). The Center retains its reporting line to the Directorate for Social, Behavioral and Economic Sciences within the National Science Foundation. The new name signals the central role of NCSES in the collection, interpretation, analysis, and dissemination of objective data on the science and engineering enterprise.

Survey Universe

The Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) is an annual census of all known academic institutions in the United States that grant master's degrees or research doctorates in science and engineering (S&E) fields and in selected health fields.^[1] The data collected in the 2009 GSS represent national estimates of graduate student enrollment and postdoctoral employment as of fall 2009.

In 2009 the survey universe consisted of 703 schools at 575 academic institutions: 493 schools at 366 doctorate-granting institutions, and 210 schools at 209 master's-granting institutions.^[2] Data collected included demographic and funding information for graduate students and postdocs, as well as counts of doctorate-holding nonfaculty researchers, by sex.

Table A-1 shows the number of institutions, schools, and organizational units (e.g., departments, degree-granting programs), by degree level covered by the GSS, and shows estimated total annual enrollment in GSS-eligible fields between 1966 and 2009. Changes in the survey that affect comparability of these data are as follows:

- 2007–09: In the 2007 survey cycle, three newly eligible fields were added, some degree-granting programs became ineligible, and others were reclassified. Data collected under this methodology since the 2007 survey cycle are not directly comparable with data from prior years. Tables in this report present data for 2007, the bridge year, in two ways. Data collected under the new methodology are shown as "2007new." For trend analysis, an estimate of 2007 data under the 2006 methodology is shown as "2007old."
- 1975–2006: The data are intended to represent consistent coverage of S&E and selected health fields. In 1989 the National Science Foundation (NSF) revised the coverage of S&E fields in the survey. Some fields were excluded, and the data for 1975–88 subsequently were revised to reflect this change.
- 1984–87: Data on master's-granting institutions were collected on a sample basis. Enrollment data for this period have been adjusted to account for the sampling and reflect estimated universe totals. Starting with the 1988 survey cycle, the GSS has attempted to cover all academic institutions that grant master's or doctoral degrees in S&E or selected health fields.
- 1978: Master's granting institutions were not surveyed in 1978. Figures for 1978 for total enrollment and full-time enrollment in master's-granting institutions are estimates based on 1977 and 1979 data. Doctorate-granting institutions received a short form of the GSS that collected selected data items; the short form did not request any information on sex, citizenship, or mechanisms of support.
- 1972–74: Eligibility definitions changed, affecting both S&E fields and types of institutions surveyed. These data are not comparable to data collected before 1972 or after 1974.
- 1966–71: Totals are for the NSF Graduate Traineeship program only and are not comparable with data from 1972 through 2009.

Tables A-2 and A-3 show the number of units surveyed, by detailed field, in doctorate-granting and master's-granting institutions. Table A-4 shows the unit response rates from 1975

through 2009. Tables A-5 through A-12 show imputed data and/or imputation rates for different categories.

Survey Instrument and Procedures

A Web survey system was the primary mode of 2009 data submission. The survey cycle was launched in October 2009 and concluded in May 2010.

The 2009 GSS Web survey consisted of two parts. Part 1 required the identification of organizational units ("units") within the reporting school. Part 1 could be completed only in the Web survey system.

Part 2 collected counts of graduate students, postdocs, and other doctorate-holding nonfaculty researchers. A paper worksheet was provided for preparing figures to later be entered in Part 2 of the Web survey. To assist with the transfer of information, the content and format of the data collection grid on the paper worksheet were identical to Part 2 of the Web survey. A small number of school coordinators chose to submit Part 2 data using the paper worksheet.

Institutions select a coordinator for each school that grants a graduate degree in an eligible field. School coordinators for the GSS are responsible for the following:

- Identifying all eligible units (e.g., departments, degree-granting programs)
- Reporting GSS data or delegating reporting to unit respondents, such as department personnel or personnel in nonacademic departments (e.g., the financial aid office or the registrar's office)
- Submitting the data for all units to the GSS survey contractor
- Providing data by field of study from administrative records

Revisions Affecting Survey Universe

The data collection methods, survey, and data products are unchanged from the 2008 survey cycle. However, the GSS underwent a redesign in the 2007 and 2008 survey cycles, as described below.

Units. The Web survey was redesigned in 2007 in an effort to include and appropriately classify all eligible units and to exclude ineligible units. See the Technical Notes section of the 2007 report for more detail.

Fields of study and degree-granting programs. In 2007 a comprehensive review of GSS eligible fields led to several changes to the classification scheme. GSS-eligible degree-granting programs were updated from the 1990 to the 2000 Classification of Instructional Programs (CIP) taxonomy of the National Center for Education Statistics (NCES). Degree-granting programs that had previously been represented by a four-digit CIP code are now represented at the six-digit level of specificity. Three newly eligible fields were added to the survey, some programs became ineligible, and others were reclassified. See the Technical Notes section of the 2007 report for more detail.

Due to these adjustments to the taxonomy and other methodological changes introduced in 2007, data collected since that year are not directly comparable with data from previous years. For trend analyses, the detailed statistical tables (DSTs) provide estimates of the counts that would have been collected in 2007 had the 2006 methodology been used (see "Bridge Year Calculation and Display," below).

Revisions to Instructions and Definitions

The definition for first-time graduate students was revised in 2008 to refer to students who were enrolled in the unit for the first time. The previous definition was "Graduate students enrolled for credit at the institution at which they are pursuing a graduate degree for the first time as of fall 2007. All other students should not be considered first-time students." A new

definition was cognitively tested prior to its introduction in 2008: "Those students enrolled for credit in a graduate degree program in this organizational unit for the first time in fall 2008. This may include graduate students previously enrolled in another graduate degree program at your institution or at another institution. It may also include students that already hold another graduate or professional degree."

Due to the rise in online degree programs, NSF received a number of questions about how to treat students who were enrolled in an online degree program but were not U.S. citizens, permanent residents holding green cards, or foreign nationals holding temporary visas. A clarification was introduced in 2008 to exclude non-U.S. citizens residing outside the United States who are enrolled in an online degree program at a U.S. institution.

Students doing thesis or dissertation research away from a U.S. campus were included beginning with the 2008 survey. The instructions read, "Count all students enrolled in a U.S. institution for credit in a graduate degree program doing thesis or dissertation research work regardless of their location."

Bridge-Year Data Calculation and Display

Due to the methodological changes introduced in 2007, including modifications to the set of GSS-eligible fields, most DSTs provide data for 2007 in two ways: "2007old" and "2007new." Data shown under 2007old provide estimates of the counts that would have been collected in 2007 had the 2006 methodology been used. Counts reported under 2007new were collected using the methodology introduced in 2007.

To derive counts for 2007old, all units that were reported in the 2006 data collection and retained in 2007 were assigned the same GSS field as in 2006. This is consistent with the 2006 GSS coding because the Web survey system before 2007 did not have a direct mechanism for changing GSS codes, and very little recoding was done. Any new unit added in 2007 was given the GSS field code assigned to it, with the following exceptions:

- Added units coded as "communication," "family and consumer sciences/human sciences," or "multidisciplinary/interdisciplinary studies" were not included in 2007old because these codes were newly eligible science fields in 2007 (unavailable in 2006).
- Added units coded as "architecture" in 2007 were reassigned to "civil engineering" in 2007old because "architecture" was subsumed within "civil engineering" in the 2006 GSS taxonomy.
- Added units coded as "neuroscience" in 2007 were reassigned to "neurology" in 2007old because "neuroscience" was subsumed within "neurology" in the 2006 GSS taxonomy.

The 2007old counts are based on a subset of the 2007 data due to the first exception listed above. A comparison of 2007old with 2007new data reflects differences due to the addition of the three newly added science fields and recoding of units from their 2006 fields to other fields.

Response Rates

The deadline for Part 1, the update of the unit list, was 30 November 2009. Schools that missed this Part 1 deadline received special attention from the survey contractor early in the survey cycle. The deadline for submitting data for Part 2 was 26 February 2010.

Units

The method for calculating the response rate for units for the 2007–09 survey cycles was different than the prior method. Some units that would have been considered complete respondents under the previous methodology are now more accurately classified as partial respondents. As in previous years, classification was based on responses to the survey's data collection grids (part-time and full-time graduate student counts, by race/ethnicity; full-time

graduate student counts, by sources/mechanisms of support; and counts of postdocs and nonfaculty researchers). However, the criteria for classifying a unit's response were more stringent:

- Units that required no imputation for any of the grids were counted as complete respondents.
- Units that required partial imputation for any of the grids were considered partial respondents.
- Units that required total imputation for all grids were counted as nonrespondents.

From 2004 through 2006 a unit was considered a *complete respondent* if it reported complete row and column totals in the data collection grids and a *partial respondent* if it reported only grand totals for these grids. Any unit that did not meet the requirements for complete or partial respondent status was considered a nonrespondent. Beginning in 2007, in order to receive complete response status, a unit needed complete row and column totals for all grids as well as all details summing to the totals. Units that had only complete row and column totals for all grids were counted as partial respondents. As in previous years, units that reported only grand totals for all tables were counted as partial respondents.

As in previous years, data-collection grids in the Web survey were prefilled with zeros. Prior to the 2007 survey cycle, prefilled zeros were considered legitimate responses if the grid was visited and left with all zeros in place. Beginning in 2007, a checkbox was placed above the grids on each of these screens. The respondent was required to check this box to acknowledge explicitly that the unit had no individuals to report for that particular grid, allowing true zeros to be distinguished from nonresponse for the grid. Grids with a marked checkbox, indicating no individuals to report, contributed to a complete response for the unit. Grids with unchanged, prefilled zeros and a blank checkbox disqualified the unit from complete response status.

Beginning in the 2007 survey cycle, an allowance was made for units that provided complete or partial data for at least one (but not all) of the grids. These units were counted as partial respondents.

These new response rate calculations adhere to American Association for Public Opinion Research standards for computing response rates.[3]

In 2009 the GSS received complete responses from 11,709 (88.1%) of the 13,285 eligible units. An additional 1,478 units (11.1%) were partial respondents. The remaining 98 units (0.7%) were nonrespondents.

Schools

The method used in 2009 to calculate school response rate was consistent with the approach used from 2004 through 2008. A school was considered a complete respondent if 90% or more of its units provided complete or partial data. A school's response was considered partial if at least 50% but less than 90% of its units provided complete or partial data. Schools for which less than 50% of the units provided data were deemed nonrespondents. Of the 703 eligible schools, 696 schools (99.0%) were complete respondents, 2 schools (0.3%) were partial respondents, and 5 schools (0.7%) were nonrespondents.

Institutions

Institutional response rates were calculated using the same thresholds for unit response used for schools. Of the 575 eligible institutions, 570 institutions (99.1%) were complete respondents, 1 institution (0.2%) was a partial respondent, and 4 institutions (0.7%) were nonrespondents.

Coverage

New data collection procedures introduced in the 2007 survey cycle (see the Technical Notes

section of the 2007 report) appear to have greatly improved inclusion of eligible units and exclusion of ineligible units. The number of unit additions increased over threefold from 2006 to 2007 and leveled off in 2008 (table 1). School coordinators added fewer units in 2009, but there were still almost twice as many units added as in 2006. The number of units deleted more than doubled from 2006 to 2007. Although the number of units deleted in 2008 and 2009 declined from the number deleted in 2007, school coordinators still removed significantly more units than in the 2006 survey cycle. The dramatic increase in the number of units added and deleted in the 2007–09 data collections suggests that there was underreporting of GSS-eligible units and overreporting of ineligible units in previous survey years.

TABLE 1. Unit list modifications: 2006–08

Activity	2006	2007	2008	2009
Units at start of data collection	12,297	12,320	12,629	13,166
Units added	397	1,273	1,215	744
Units deleted	374	964	678	625
Units at end of data collection	12,320	12,629	13,166	13,285
Net difference	23	309	537	119

Retrieval and Editing

Data quality is ensured by interactive edit checks built into the Web survey and a comprehensive review after the data are submitted by the school coordinator. The Web survey checks that the counts provided are internally consistent and within an expected range based on the previous year's data. Unit respondents are asked to explain the discrepancy whenever counts are substantially different from the response provided in 2008.

Five types of postsubmission data quality checks were implemented in 2009 to identify questionable data for further review. These checks included changes to the unit list, changes to total counts, changes to the distribution of counts, identical counts, and counts inconsistent with the unit's status. Changes to the unit list included all unit additions and deletions and also changes to the highest degree granted status, GSS code, and unit name. Total count changes were reviewed if they were flagged by the survey instrument, were greater than five and went to/from zero, or were more than two standard deviations away from the mean change for that total. Significant changes to the distribution of counts by race/ethnicity, gender, or primary funding type were also reviewed, as were all cases where the responses provided in any given grid were unchanged from the previous survey cycle or identical to the data provided for a different grid or unit in the same school in the same survey cycle. Finally, data that were inconsistent with a unit's status were examined, such as when all full-time students were reported as first-time students for an extant unit or when graduate students were enumerated for a non-degree granting unit.

Data fluctuations that were not sufficiently explained by the comments provided by the respondents during data collection were flagged for follow-up by telephone call to the school coordinator. Revisions were made directly in the Web survey by the school coordinator, unit respondents, or GSS contractor staff at the direction of the school coordinator. The data collected in the 2009 survey cycle were subject to the most rigorous review to date, resulting in one or more revisions within 4.7% of all reported units (629 of 13,285) spread across 26.0% of all schools (183 of 703). These figures are approximately triple the comparable 2008 figures (1.4% of units and 9.2% of schools) and demonstrate that the 2009 data review and retrieval process was effective in uncovering and correcting errors within the GSS data. As a proportion of overall counts before imputation for nonresponse, the number of part-time students saw the largest change (−3.4%), followed by counts of doctorate-holding nonfaculty researchers (1.8%); first-time, full-time graduate students (−1.6%); and full-time graduate students (−1.4%). The total count of postdocs was relatively unaffected by retrieval (0.2%). See "Known or Suspected Sources of Nonsampling Error" below for a discussion of the types of measurement error detected in the 2009 data review and retrieval process.

Item Nonresponse and Imputation

Of the 216 items collected in the four data collection grids in the 2009 GSS, the mean item nonresponse rate was 4.2%. The item nonresponse rates ranged from 1.0% for total number of full-time students and part-time students to 7.1% for the number of male postdocs whose largest mechanism of support is a federal research grant. All missing data were imputed.

Different imputation techniques were used for extant units and new units. For units with at least 1 year of reported or imputed data, a *carry-forward* imputation method was used. Inflation factors were calculated for four key totals to account for year-to-year change. The previous year's key totals were then multiplied by these inflation factors to calculate the imputed values for the current year's key totals. Finally, all other variables were imputed by distributing the imputed key totals according to the previous year's proportions. The same procedure was used in the 2008 imputations. In 2007 the carry-forward method was used only if the unit reported data within the previous 5 years. This condition was lifted in 2008 because simulations using the 2007 data revealed that the carry-forward method performed better than other methods, even if the previous data were reported over 20 years ago.

When no reported or imputed data existed for a unit in a prior survey cycle, a different approach was needed. For new units with reported totals but no details in 2009, a *nearest neighbor* imputation method was used. In this method a donor unit that was "nearest" to the unit whose data were being imputed (imputee) was identified among all responding units having similar characteristics as the imputee (such as having the same GSS code and offering a PhD degree). When graduate student details were being imputed, the nearest neighbor selected had full-time and part-time graduate enrollments that were most similar to the imputee's enrollments. When postdoc and doctorate-holding nonfaculty researcher details were being imputed, the total number of postdocs was used to choose the nearest neighbor. The imputed values were calculated by adjusting the donor's values to account for the difference in full-time and part-time enrollment totals between the two units.

In rare circumstances when no data were available from a new unit, Integrated Postsecondary Education Data System (IPEDS) completions and enrollment data were used to estimate graduate student totals and details. This approach was instituted with the 2008 survey cycle based on research that demonstrated its superiority over a nearest-neighbor method under these conditions. Because IPEDS does not collect data on postdocs and doctorate-holding nonfaculty researchers, a nearest neighbor was selected from the 2009 GSS data to estimate these counts.

Known or Suspected Sources of Nonsampling Error

Review of the data, cognitive interviews, usability tests, pilot tests, site visits, and other methodological activities with the institutions have pointed to a number of possible sources of measurement error. These are discussed below, along with any steps taken to minimize the impact on the data, where applicable.

Data review and telephone interviews conducted with school coordinators have revealed overreporting of graduate students working toward practitioner degrees, particularly in health fields. Starting with the 2007 survey cycle, survey materials indicated that students pursuing master's, DDS, or MD degrees in 24 specified fields should be excluded. After the change in survey materials, school coordinators often provided a comment explaining that they were deleting a unit because the degrees it offers are practitioner based. This provides some indication that these procedures may have reduced reporting error. However, the data quality control process in 2009 indicated that some school coordinators were still reporting graduate students in practitioner-based degree programs. Many school coordinators revised downward the total count of graduate students in fields with degree exclusions, particularly among nursing units, after being contacted about questionable data. Systematic checks for this type of measurement error ensure that school coordinators are aware of the degree exclusions and are reporting data appropriately.

Data review and retrieval indicated that zeros reported by respondents sometimes represent nonresponse rather than actual zero counts. Not distinguishing between the two could result in low estimates, given that data for a given variable are not imputed when item nonresponse is misinterpreted as a zero response. In 2007 to distinguish zero-entered responses from true nonresponses, a checkbox was added for the respondent to confirm a zero entry. Although this helped to reduce substantially the number of ambiguous zero counts, counts for the subgroups still had similar problems. In 2008 the survey was revised to collect the subgroup counts directly, reducing such instances. In 2009 all remaining ambiguous zero counts were reviewed, and follow-up calls with respondents were made to clarify responses, as needed.

As a result of data review and retrieval, zeros for the total number of full-time students; first-time, full-time students; and doctorate-holding nonfaculty researchers were replaced with a positive count in approximately one-quarter of the instances identified as needing review (22.3%, 26.9%, 25.3%, respectively). Zero counts for part-time students and postdocs were also revised fairly often (12.5% and 17.0%, respectively). Although some instances of nonresponse zeros masquerading as reported zeros were rectified during data review and retrieval in the past, the increased rigor of the process in the 2009 survey cycle minimized this type of reporting error. Moreover, with further revisions to the Web survey in the 2010 survey cycle, most instances of ambiguous zeros will be eliminated.

Methodological research, data review and retrieval, and feedback from respondents indicated that graduate students' financial support data were difficult for respondents to report and, therefore, more prone to measurement error than other survey data. These data are difficult for school coordinators to collect accurately, because the information may not be stored in one centralized database for the institution. Also, types of financial support that are not channeled through the institution, such as self-support, may be underreported, and foreign sources of support are not always known. Respondents may also have difficulty categorizing financial information by field, such as when a student is enrolled in one unit but receives support from another. Finally, institutions define mechanisms of support differently (e.g., fellowships vs. traineeships) and may report students according to the institution's definition rather than the definition provided by the GSS.

Usability tests conducted with respondents in 2008 revealed that there had been some misreporting of race and ethnicity. This was due to the unclear format of the GSS race/ethnicity questions. The format reflected NSF's interpretation of the Office and Management and Budget's (OMB's) 1997 revision of its standards on collecting these data. In 1999 GSS began collecting data on Hispanics of one race separately from data on multiracial Hispanics, although this was not necessary for compliance with the revised OMB standards. The cognitive interviews revealed that black Hispanics and white Hispanics were sometimes counted in the "Hispanic—More than one race" category rather than in the appropriate "Only one race—Hispanic" category. In 2008 these two Hispanic categories were collapsed into one, "Hispanic/Latino ethnicity (one or more races)." Subsequent cognitive interviews indicated that the new grouping was easier for respondents to understand.

Increasing numbers of students are choosing not to report their race to their institution, leading to growth over time in the "Unknown/race not stated" GSS category. This leads to gradual declines in the proportion of students reported in some racial and ethnic groups. This is a trend that is not unique to GSS.

Interviews and usability tests with respondents have found that data on postdocs and doctorate-holding nonfaculty researchers are particularly challenging for some respondents to report. Many respondents indicate in the Web survey that they are unable to provide data on their unit's postdocs or doctorate-holding nonfaculty researchers. A pilot study was conducted to evaluate alternative procedures for collecting these data so that more complete and accurate data may be collected in the future. Starting with the 2010 survey cycle, schools will be given the option of appointing a separate postdoc coordinator who may be more

knowledgeable about the postdocs or appointees at their school to provide these data.

Anecdotal evidence indicated some double counting may have occurred when an institution had more than one school coordinator or offered joint programs, although written instructions emphasized that each individual should be counted only once. In order to reduce double counting, facilitate interinstitution communication, and allow sharing of reported data, a screen in the Web survey provides names and contact information for all school coordinators at the institution.

Changes in Eligibility and Degree-Granting Status

Institutions are classified as *doctorate granting* if at least one GSS-eligible unit confers doctoral degrees. Twelve institutions changed GSS degree-granting status in 2009. The status of five institutions or schools changed from eligible to ineligible, based on criteria for inclusion in the GSS (see "Survey Universe," above).

Status changed to doctorate-granting from master's-granting, 10 institutions:

- A. T. Still University of Health Sciences
- Bloomsburg University of Pennsylvania
- Bradley University
- Gannon University
- Grand Valley State University
- Ithaca College
- Kean University
- Marymount University
- University of Evansville
- University of Wisconsin-LaCrosse

Status changed to master's-granting from doctorate-granting, 2 institutions:

- University of Northern Iowa
- McNeese State University

Status changed from eligible to ineligible, 4 institutions/schools:

- California University of Pennsylvania
- John F. Kennedy University
- Spalding University
- University of Richmond

Institution Name Changes and Mergers

Four institutions reported a name change in 2009:

2008 name	2009 name
Loyola College	Loyola University of Maryland
New York Medical College School of Public Health	New York Medical College—School of Sciences and Practice
Pacific Graduate School of Psychology	Palo Alto University
Polytechnic University	Polytechnic Institute of New York University

Data Revisions

In 2007 the GSS discontinued the practice of revising previous years' data based on changes the institutions report in units' eligibility and institutions' doctorate-granting status in the current survey cycle. Previously, reported counts for a given year fluctuated with each annual report because the current year's eligibility and doctorate-granting status changes were applied retrospectively to all years in the DSTs. Except for table 68, counts in the 2009 DSTs for 2003–06 reflect eligibility and doctorate-granting status as of fall 2006; they have not

been adjusted to reflect changes in status that may have occurred between fall 2006 and fall 2009.

Table 68 historically has listed and ranked each institution that was doctorate-granting in the current survey cycle, regardless of doctoral-degree-granting status or eligibility in previous years. These rules have been continued in 2009. Thus, in table 68, data in years 2003–08 are counts of graduate students in those institutions that were doctorate granting in 2009, and totals for 2003–08 in this table differ from totals for 2003–08 in other tables for doctorate-granting institutions in this report.

When requested by the institution, the GSS will replace imputed estimates with actual data, but only for the most recent prior survey cycle. No such requests were made in the 2009 survey cycle.

Definitions

Data collected in 2009 included demographic and funding information for graduate students, postdocs, and doctorate-holding nonfaculty researchers. Definitions of key terms follow.

Enrollment Status

Full-time and part-time—Respondents were instructed to use their institution's definition.

First-time—Those students enrolled for credit in a graduate degree program in an organizational unit for the first time in fall 2009. This may include graduate students previously enrolled in another graduate degree program at the institution or at another institution. It may also include students who already hold another graduate or professional degree.

Race/Ethnicity

The GSS uses definitions of race/ethnicity that are based on the OMB's "Standards for the Classification of Federal Data on Race and Ethnicity":

American Indian or Alaska Native—A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.

Asian—A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American—A person having origins in any of the black racial groups of Africa.

Native Hawaiian or Other Pacific Islander—A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific islands.

White—A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Hispanic or Latino[4]—A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

Non-Hispanic/Latino, more than one race—Institutions report persons who indicate more than one race and are non-Hispanic into that category on the GSS form. The reports and DSTs combine multiracial non-Hispanics with those of unknown race because no more than 0.2% of graduate students are identified as such.

Although the survey forms began collecting Asian and Native Hawaiian/Other Pacific Islander data separately in 1999, reports and DSTs have continued to combine these

categories as Asian/Other Pacific Islander because less than 0.5% of graduate students have been reported in the Native Hawaiian/Other Pacific Islander category.

From 1999 through 2007 the survey forms collected counts of Hispanics of one race separately from counts of Hispanics reporting two or more races. However, reports and DSTs in these years combined these data in a single Hispanic or Latino category because no more than 0.5% of graduate students were classified as multiracial Hispanics. In 2008 the survey forms combined these categories into a single Hispanic or Latino category.

Historically black colleges and universities (HBCUs)

Historically black colleges and universities (HBCUs)—Institutions of higher education that have been historically considered to enroll predominantly black students. An official list of HBCUs is maintained by the Department of Education. This list, which is reviewed annually, serves as the basis by which institutions are considered to have HBCU standing for the Graduate Student Survey.

Graduate Student Mechanisms of Support

Graduate fellowship—Any competitive award (often from a national competition) given to a student that requires no work of the recipient.

Graduate traineeship—An educational award given to a student selected by the institution.

Graduate research assistantship—An assistantship where most of the student's responsibilities are devoted to research.

Graduate teaching assistantship—An assistantship where most of the student's responsibilities are devoted to teaching.

Other types of support—All other mechanisms of support for full-time students, including self-supported students and members of the armed forces whose tuition is paid by the U.S. Department of Defense.

Postdoctoral Researchers (Postdocs)

Postdoc—An individual who meets both of the following qualifications:

(1) Holds a recent doctoral degree, generally awarded within the last 5 years, such as

- PhD or equivalent (e.g., ScD or DEng)
- First-professional degree in a medical or related field (MD, DDS, DO, or DVM)
- Foreign equivalent to a U.S. doctoral degree

(2) Has a limited-term appointment, generally from 5 to 7 years,

- Primarily for training in research or scholarship
- Working under the supervision of a senior scholar in a unit affiliated with the institution

Mechanisms of Postdoc Support

Federal fellowship—Any competitive award from the U.S. government (often from a national competition) that requires no work of the recipient.

Federal traineeship—An educational award from the U.S. government given to a postdoc selected by the institution.

Federal research grant—A type of financial assistance award from the U.S. government to an organization or individual to conduct specific research activities.

Nonfederal support—Support from state and local government; the academic institution; foreign sources (e.g., foreign governments, foreign firms, and agencies of the United Nations);

and other U.S. sources, such as support from nonprofit institutions, private industry, and all other nonfederal U.S. sources.

Doctorate-Holding Nonfaculty Researchers

Doctorate-Holding Nonfaculty Researchers—All doctorate-holding researchers who (a) are not considered either postdocs or members of the faculty and (b) are involved principally in S&E or health research activities.

Historical Changes

Changes have been made to the coverage and content of the GSS to keep it relevant to the needs of data users. Such changes prevent precise maintenance of trend data; therefore, some data items are not available for all institutions in all years. Major changes in the data collected (with the year in which changes became effective) include the following:

Data Revisions

1988–2006 Retrospective revisions of estimates based on changes in unit eligibility began in 1988 and continued through 2006. Data for units no longer eligible were removed from the counts that were originally published from 1975 through 1988, and revised estimates were produced. These changes resulted in a reduction in total enrollments and social science enrollments for all years.

1992–2006 Starting in 1992, annual reporting was revised retrospectively to reflect the degree-granting status (master's or doctorate) of the institution responding to the current survey cycle. Over the years, a number of master's-granting institutions became doctorate-granting institutions and a few doctorate-granting institutions became master's-granting institutions. As a consequence, the enrollment data in these institutions were reclassified to reflect their degree-granting status as of the most recent survey cycle. This practice was discontinued in 2007.

Demographic Characteristics

Sex

1975 Master's-granting institutions were first requested to provide data on full-time graduate students by sex.

1977 Data on part-time graduate students by sex were collected from master's-granting institutions for the first time.

1978 Doctorate-granting institutions received a short form of GSS that collected selected data items, the short form did not request any information on sex, and 1978 figures in the DSTs represent estimates based on 1977 and 1979 data. Master's-granting institutions were not surveyed.

1979 Data on sex were requested for all graduate students at all institutions.

1993 GSS began collecting race/ethnicity data by sex.

2008 The GSS began collecting the number of first-time, full-time male graduate students by race/ethnicity; full-time male graduate students by source of support; male postdocs by source of support; and male doctorate-holding nonfaculty researchers. Previously, the number of men was inferred by subtracting the number of women from the total.

Race/ethnicity

1979 The GSS began collecting race/ethnicity data for full-time and part-time

graduate students who were U.S. citizens as an optional data item; collection of this information became an official part of the GSS in 1980.

1992 The GSS began including permanent residents with the counts of U.S. citizens. Beginning in 1992, the race/ethnicity data collected for full-time and part-time graduate students include permanent residents.

1993 The GSS began collecting race/ethnicity data by sex.

1999 The GSS presented respondents with new race/ethnicity categories. The "Asian/Other Pacific Islander" category used in previous years' surveys became two categories: "Asian" and "Native Hawaiian/Other Pacific Islander." In addition, the survey included two new categories: "more than one race Hispanic/Latino" and "more than one race non-Hispanic/Latino." The 1999 survey excluded the "other" category that had been included in previous years' surveys.

Although new race/ethnicity categories were added in 1999, reports and DSTs combined the data into the previous categories because no more than 0.5% of graduate students were reported in the "Native Hawaiian/Other Pacific Islander" and the "more than one race" categories each year. Since 1999 data reported in the new categories have been combined as follows: the "Asian" and "Native Hawaiian/Other Pacific Islander" categories form the "Asian/Other Pacific Islander" category, the "one race only Hispanic/Latino" and "more than one race Hispanic/Latino" categories form the "Hispanic" category, and the "more than one race non-Hispanic/Latino" and "unknown or did not state" categories form the "other or unknown" category.

2008 The race/ethnicity categories were revised to correspond to IPEDS by combining the "Hispanic/Latino, one race only," and "Hispanic/Latino, more than one race," categories into "Hispanic/Latino (one or more races)."

Citizenship

1972–79 The GSS collected citizenship data for graduate students selectively in these years. These data are not included on the data file.

1977 The GSS began collecting citizenship data for postdocs.

1978 Doctorate-granting institutions received a short form of the GSS that did not collect any data on postdocs. Master's-granting institutions were not surveyed.

1980 Citizenship data were collected for all graduate students enrolled full-time. These data have been included on the data file since 1980.

1982 Citizenship data were collected for all graduate students enrolled part-time. These data have been included on the data file since 1982.

1992 GSS changed the definitions of foreign students and U.S. citizens to match those used by NCES. Starting in 1992, it began including permanent residents with the count of U.S. citizens instead of with the count of foreign students.

2008 GSS instructions to institutions were clarified to specifically exclude counting of non-U.S. citizens residing outside the United States who were enrolled in the institution's online degree program(s).

Enrollment Status

- 1975 Graduate institutions that granted only master's degrees were asked to provide estimates for the number of full- and part-time students.
- 1999 GSS began collecting data on first-time, full-time enrollment by race/ethnicity and sex; these citizenship data were first reported in 2000.

Graduate Student Support

- 1978 The GSS did not collect data on mechanisms of support but did collect data on sources of support for full-time students. Because actual mechanisms of support were unknown, data were reported only as "other." Master's-granting institutions were not surveyed.
- 1979 The GSS began collecting separate data on mechanisms of support for fellowships and traineeships. (Prior years had combined these mechanisms.)
- 1985 The GSS began collecting separate data on students receiving their primary support from the U.S. Department of Agriculture.
- 1996 The GSS began collecting separate data on students receiving their primary support from the National Aeronautics and Space Administration.
- 1999 The GSS began collecting separate data on students receiving their primary support from the U.S. Department of Energy.
- 2008 Data were no longer collected for National Institutes of Health (NIH) teaching assistantships because NIH does not offer financial support to graduate students through this mechanism.
- 2008 The GSS began collecting the number of full-time graduate students whose largest source of support came from a non-U.S. source via a teaching assistantship.

Instrument

- 1975–77 Data for master's-granting institutions were collected on an abbreviated form of the GSS (short form).
- 1978 Doctorate-granting institutions received a short form of the GSS collecting selected data items; master's-granting institutions were not surveyed. Figures for 1978 for total enrollment and full-time enrollment in master's-granting institutions are estimates based on 1977 and 1979 data.
- 1979 All graduate institutions were surveyed using the same form; the full-scale survey was resumed.
- 1998 The GSS made a Web-based reporting system available to school coordinators and departmental respondents.

Postdocs and Doctorate-Holding Nonfaculty Researchers

- 1972 The GSS began collecting sources and mechanisms of support for postdocs and/or research associates as one combined category.
- 1977 The GSS began collecting information on citizenship for postdocs and/or research associates.
- 1979 The GSS changed "research associates" to "nonfaculty research staff with doctorates" and began collecting separate data on postdocs and nonfaculty research staff. It also began collecting information by sex. At this time, the variable "sources of support, by mechanism of support" was collected only for postdocs; it was not collected for other nonfaculty research staff with doctorates.
- 1979 The GSS began collecting separate data on mechanisms of support for fellowships and traineeships. (Prior years had combined these mechanisms.)
- 1983 The GSS began collecting information on medical degree status.

Survey Universe

Institutions Surveyed

- 1966–71 Data were collected from a limited number of doctorate-granting institutions through the NSF Graduate Traineeship Program. Data are not comparable with data from 1972 through 2007.
- 1972–74 Beginning with the 1972 survey, NSF assigned this data collection effort to the Universities and Nonprofit Institutions Studies Group and gradually expanded the effort during 1972–74 to include all institutions known to have programs leading to a doctorate or master's degree. These data are not comparable to data collected before 1972 or after 1974. NSF has not inflated the data for 1966–74 to reflect universe totals.
- 1975 Graduate institutions that granted only master's degrees in science, engineering, and health fields were asked to provide estimates for the number of full- and part-time students and the number of postdocs or research associates.
- 1975–77 Data for master's-granting institutions were collected on an abbreviated form of the GSS (short form).
- 1978 Doctorate-granting institutions received a short form of the GSS collecting selected data items; master's-granting institutions were not surveyed. Figures for 1978 for total enrollment and full-time enrollment in master's-granting institutions are estimates based on 1977 and 1979 data.
- 1979 All graduate institutions were surveyed using the same form; the full-scale survey was resumed.
- 1984–87 The survey design was changed to a stratified random sample with a certainty stratum that included all doctorate-granting institutions; all master's-granting, historically black colleges and universities; and all land-grant institutions. The remaining master's-granting institutions were divided into two sample strata,

based on enrollment size. Enrollment data for 1984–87 have been adjusted to reflect universe totals.

- 1988 Surveying the entire eligible survey population was resumed for the first time since 1983. Since 1988 the GSS has attempted to cover all academic institutions that grant master's degrees or research doctorates in science, engineering, and selected health fields.
- 1992 The definition of medical schools was revised during the fall 1992 survey cycle to include only those institutional components that are members of the Association of American Medical Colleges (AAMC). Tables generated after the fall 1992 survey differ from their counterparts in earlier years in that they exclude schools of nursing, public health, dentistry, veterinary medicine, and other health-related disciplines, and they should not be compared with tables from earlier years.
- 2005 Due to Hurricane Katrina, data for Tulane University and Loyola University New Orleans were not included, and Louisiana State University (LSU) data are for the Graduate School (Baton Rouge) and Health Sciences Center (Shreveport) only; the two New Orleans campuses of LSU were closed. Data from these schools were not available and were not imputed.
- 2008 Three members of the AAMC were added to the GSS. These were Northeastern Ohio Universities Colleges of Medicine and Pharmacy, Universidad Central del Caribe School of Medicine, and University of Missouri–Kansas City School of Medicine.

GSS-Eligible Fields

- 1966–71 Data were collected only for S&E fields supported by NSF from a limited number of doctorate-granting institutions through the NSF Graduate Traineeship Program. NSF has made no attempt to inflate the data for 1966–71 to reflect universe totals.
- 1972–75 Beginning with the 1972 survey, NSF assigned this data collection effort to the Universities and Nonprofit Institutions Studies Group and gradually expanded the effort during the period 1972–75 to include additional S&E fields and selected health fields. Due to this expansion, data for 1974 and earlier years are not strictly comparable with data from 1975 and later. NSF has not inflated the data for 1972–74 to reflect universe totals.
- 1988 NSF reviewed and tightened the criteria for including departments in the survey universe. NSF considered those departments that were not primarily oriented toward granting research degrees as no longer meeting the definition of S&E. As a result of this review, NSF determined that a number of departments, especially in the field of "social sciences, not elsewhere classified," were engaged primarily in training teachers, practitioners, administrators, or managers rather than researchers; consequently NSF deleted these departments from the database. NSF continued this process throughout 1989–2006 and expanded it to ensure trend consistency for the entire period from 1975 through 2006. As a result of these changes, total enrollments and social science enrollments were reduced for all years.

2007	NSF reviewed and updated the classification scheme of GSS-eligible S&E and health fields. The new scheme was first used in the 2007 survey cycle. Three newly eligible fields were added, some degree-granting programs became ineligible, and others were reclassified. Practitioner-based fields were deemed ineligible.
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Data Availability

NSF's National Center for Science and Engineering Statistics (NCSES) releases the data from this survey annually in its *Graduate Students and Postdoctorates in Science and Engineering* InfoBrief and DSTs series. The information from this survey is also included in the publications *Science and Engineering Indicators* and *Women, Minorities, and Persons with Disabilities in Science and Engineering*. NSF includes selected data items from this survey for individual doctorate-granting institutions in the NCSES Academic Institutional Profiles series (<http://www.nsf.gov/statistics/profiles/>).

Data from this survey are available through the WebCASPAR data system. Public-use data files in Excel, SAS, and SPSS formats and the guide to the public-use data files are available for the years 1972–2009 at http://www.nsf.gov/statistics/srvygradpostdoc/pub_data.cfm.

The GSS public-use data structure was modified in the 2007 survey cycle. Significant changes include dropping the multirecord structure at the organizational unit level and combining all information associated with the organizational unit into a single-record-per-unit structure. Another notable addition is the inclusion of the IPEDS UNITID, which is a unique number for all postsecondary institutions to facilitate linkages to other data files. For more information, see the guide to public-use data files.

Notes

[1] The research doctorate is a research degree that (1) requires an original contribution of knowledge to a field (typically, but not always, in the form of a written dissertation) and (2) is not primarily intended for the practice of a profession. For additional survey information and available data related to graduate student enrollment and postdocs in S&E, see <http://www.nsf.gov/statistics/srvygradpostdoc/>.

[2] In this report, the term "school" refers to a graduate school, medical school, dental school, nursing school, or school of public health; an affiliated research center; a branch campus; or any other organizational component within an academic institution that grants an S&E or selected health degree.

[3] See response rate 3 calculation, page 45, in American Association for Public Opinion Research (AAPOR). 2011. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. 7th ed. AAPOR.

[4] The OMB standards treat Hispanics as an ethnic group rather than a racial group. Following these standards, "Hispanic" is not counted as a race in GSS. Cognitive interviews with respondents have revealed that this is a source of considerable confusion. For example, black Hispanics and white Hispanics may be counted as "Hispanic—More than one race" rather than "Only one race—Hispanic." In 2008 these two Hispanic categories were collapsed into one, "Hispanic/Latino ethnicity (one or more races)." The race/ethnicity categories were made to match IPEDS by combining the "Hispanic/Latino, more than one race" and "Hispanic/Latino, one race only" categories.

Technical Tables

Table Title

- A-1 The NSF data collection series: 1966–2009
- A-2 Science, engineering, and health organizational units in doctorate-granting institutions, by detailed field: 2003–09
- A-3 Science, engineering, and health organizational units in master's-granting institutions, by detailed field: 2003–09
- A-4 Response rates for science, engineering, and health organizational units: 1975–2009
- A-5 Imputation for nonresponse in doctorate-granting institutions, by field and graduate enrollment or postdoctoral status: 2007–09
- A-6 Imputation for nonresponse in master's-granting institutions, by field and graduate enrollment or postdoctoral status: 2007–09
- A-7 Imputation rates of full-time graduate students in science, engineering, and health fields, by source and mechanism of support: 2009
- A-8 Imputed full-time graduate students in science, engineering, and health fields, by source and mechanism of support: 2009
- A-9 Imputation rates of graduate students in science, engineering, and health fields, by citizenship, race/ethnicity, enrollment status, and sex: 2009
- A-10 Imputed graduate students in science, engineering, and health fields, by citizenship, race/ethnicity, enrollment status, and sex: 2009
- A-11 Imputation rates of postdoctorates in science, engineering, and health fields, by source of support, and imputation rates of nonfaculty research staff with doctorates: 2009
- A-12 Imputed postdoctorates in science, engineering, and health fields, by source of support, and imputed nonfaculty research staff with doctorates: 2009

TABLE A-1. The NSF data collection series: 1966–2009

Year	Institutions surveyed	Schools surveyed ^a	Organizational units surveyed			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full time	Part time
Graduate Traineeship Program								
1966	204	204	2,866	441	2,425	169,303	124,255	45,048
1967	209	209	3,014	434	2,580	179,622	133,972	45,650
1968	219	219	3,190	454	2,736	184,759	140,714	44,045
1969	224	224	3,354	460	2,894	196,341	147,515	48,826
1970	227	227	3,544	473	3,071	201,918	153,250	48,668
1971 ^b	224	224	3,397	407	2,990	214,680	164,764	49,916
Doctorate institutions								
1972	252	321	4,568	764	3,804	207,859	159,392	48,467
1973	255	333	6,523	851	5,672	214,348	161,525	52,823
1974	276	367	7,468	1,387	6,081	259,968	190,562	69,406
1975	345	443	8,031	1,857	6,174	301,902	209,328	92,574
1976	355	454	8,131	1,916	6,215	305,824	213,033	92,791
1977	357	460	8,361	2,050	6,311	313,938	215,377	98,561
1978	345	454	8,381	1,998	6,383	308,107	211,508	96,599
1979	371	487	8,612	2,130	6,482	323,677	219,634	104,043
1980	370	486	8,714	2,174	6,540	333,164	225,877	107,287
1981	370	484	8,645	2,174	6,471	339,946	229,708	110,238
1982	369	484	8,504	2,162	6,342	346,668	232,980	113,688
1983	370	485	8,386	2,133	6,253	354,060	239,220	114,840
1984	345	464	8,320	2,033	6,287	353,673	239,400	114,273
1985	345	459	8,434	2,074	6,360	362,581	242,748	119,833
1986	345	461	8,509	2,083	6,426	373,545	251,562	121,983
1987	349	467	8,626	2,087	6,539	378,785	255,936	122,849
1988	375	494	8,949	2,250	6,699	386,300	262,351	123,949
1989	378	497	9,084	2,276	6,808	394,510	269,679	124,831
1990	377	496	9,234	2,332	6,902	409,419	278,637	130,782
1991	377	496	9,435	2,362	7,073	425,914	291,508	134,406
1992	377	496	9,678	2,417	7,261	445,704	305,979	139,725
1993	377	496	9,875	2,434	7,441	454,745	312,519	142,226
1994	376	495	10,093	2,499	7,594	455,332	313,976	141,356
1995	375	494	10,269	2,552	7,717	449,555	310,538	139,017
1996	376	495	10,289	2,608	7,681	444,319	309,418	134,901
1997	375	498	10,271	2,688	7,583	438,135	307,697	130,438
1998	375	497	10,366	2,713	7,653	435,826	307,040	128,786
1999	376	498	10,482	2,683	7,799	443,104	313,866	129,238
2000	375	497	10,526	2,726	7,800	443,542	319,923	123,619
2001	379	500	10,577	2,728	7,849	459,438	332,732	126,706
2002	374	495	10,726	2,778	7,948	487,645	355,611	132,034
2003	374	495	10,849	2,790	8,059	510,335	372,366	137,969
2004	374	495	10,858	2,781	8,077	518,641	377,984	140,657
2005	374	494	11,004	2,758	8,246	527,048	381,198	145,850
2006	374	495	10,946	2,745	8,201	542,073	393,138	148,935
2007old ^c	375	493	10,976	2,830	8,146	551,832	403,722	148,110
2007new ^c	375	493	11,210	2,949	8,261	561,352	409,421	151,931
2008	376	505	11,773	3,042	8,731	574,241	422,287	151,954
2009	366	493	11,865	2,956	8,909	573,883	428,856	145,027
Master's institutions								
1975 ^d	239	239	972	972	na	26,608	10,320	16,288
1976	239	239	979	979	na	27,892	10,379	17,513
1977	244	244	1,031	1,031	na	31,436	11,361	20,075
1978 ^e	254	254	1,128	1,128	na	31,805	11,522	20,283
1979	258	258	1,074	1,074	na	33,901	12,126	21,775

TABLE A-1. The NSF data collection series: 1966–2009

Year	Institutions surveyed	Schools surveyed ^a	Organizational units surveyed			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full time	Part time
1980	256	256	1,084	1,084	na	33,914	12,539	21,375
1981	252	252	1,083	1,083	na	35,184	12,341	22,843
1982	240	240	1,080	1,080	na	35,623	11,777	23,846
1983	238	238	1,081	1,081	na	36,372	12,797	23,575
1984	66	66	471	471	na	40,997	14,522	26,475
1985	66	66	477	477	na	41,440	14,539	26,901
1986	66	66	476	476	na	41,975	14,606	27,369
1987	66	66	478	478	na	42,712	15,120	27,592
1988	229	229	1,066	1,066	na	38,223	12,776	25,447
1989	229	229	1,103	1,103	na	39,968	12,969	26,999
1990	231	231	1,124	1,124	na	42,694	14,145	28,549
1991	230	230	1,163	1,163	na	45,298	15,502	29,796
1992	229	229	1,194	1,194	na	47,818	16,576	31,242
1993	227	227	1,228	1,228	na	49,559	17,125	32,434
1994	227	227	1,272	1,272	na	49,067	18,112	30,955
1995	226	226	1,297	1,297	na	50,085	18,745	31,340
1996	225	225	1,290	1,290	na	49,760	19,118	30,642
1997	224	224	1,318	1,318	na	49,073	19,592	29,481
1998	224	224	1,319	1,319	na	49,801	20,349	29,452
1999	221	221	1,345	1,345	na	50,152	20,557	29,595
2000	219	219	1,368	1,368	na	49,769	21,360	28,409
2001	220	220	1,385	1,385	na	50,169	21,790	28,379
2002	220	220	1,400	1,400	na	52,759	23,380	29,379
2003	217	217	1,412	1,412	na	56,786	25,054	31,732
2004	215	215	1,410	1,410	na	55,822	24,589	31,233
2005	214	214	1,391	1,391	na	55,178	25,422	29,756
2006	212	212	1,374	1,374	na	55,570	25,877	29,693
2007old ^c	207	207	1,349	1,349	na	55,991	27,138	28,853
2007new ^c	207	207	1,419	1,419	na	58,147	27,944	30,203
2008	203	203	1,393	1,393	na	57,248	27,326	29,922
2009	209	210	1,420	1,420	na	57,762	27,259	30,503

na = not applicable.

^a Schools are administrative and degree-granting entities within academic institutions. Schools surveyed may exceed institutions surveyed because schools at some institutions report information to the survey separately. Examples of schools eligible for the GSS include graduate schools, schools of architecture, schools of medicine, schools of nursing, schools of pharmacology, schools of public health, and schools of veterinary medicine.

^b The 1972 survey also collected selected data for 1971.

^c In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A, "Technical Notes," for further details and specific field changes.

^d The 1976 survey also collected 1975 data from master's-granting institutions.

^e Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

NOTES: Data from 1966 to 1974 are not directly comparable with data from 1975 forward due to changes both in the science and engineering fields and in the types of institutions covered in the survey. In 2007, newly eligible science fields were added.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-2. Science, engineering, and health organizational units in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005 ^a	2006	2007old ^b	2007new ^b	2008	2009
All surveyed fields	10,849	10,858	11,004	10,946	10,976	11,210	11,773	11,865
Science and engineering	7,828	7,870	7,990	7,993	8,235	8,516	9,008	9,191
Science	6,269	6,308	6,402	6,397	6,571	6,840	7,272	7,435
Agricultural sciences	364	377	389	383	388	393	438	453
Biological sciences	2,074	2,050	2,090	2,083	2,101	2,092	2,175	2,227
Anatomy	80	75	74	70	67	65	60	59
Biochemistry	185	181	184	181	183	178	182	183
Biology	269	268	269	275	271	260	273	274
Biometry/epidemiology	91	93	95	95	105	117	126	136
Biophysics	33	34	35	36	37	35	35	36
Botany	76	71	72	71	69	67	67	68
Cell/molecular biology	161	159	166	177	180	181	192	205
Ecology	43	45	45	46	51	47	44	41
Entomology/parasitology	44	42	40	40	39	39	42	40
Genetics	99	97	102	98	101	102	106	108
Microbiology/immunology/virology	259	248	246	237	234	225	229	225
Nutrition	128	127	131	131	128	120	121	121
Pathology	131	125	123	118	107	106	113	116
Pharmacology	165	156	155	152	151	150	154	158
Physiology	124	123	123	120	123	139	160	163
Zoology	32	29	29	27	27	27	22	20
Biological sciences, nec	154	177	201	209	228	234	249	274
Communication ^b	ne	ne	ne	ne	ne	119	142	156
Computer sciences	367	382	391	394	409	401	417	422
Earth, atmospheric, and ocean sciences	374	373	376	375	382	374	387	388
Atmospheric sciences	34	35	36	33	38	40	42	42
Geosciences	206	207	208	205	208	206	212	215
Ocean sciences	57	57	56	57	59	57	59	59
Earth/atmospheric/ocean sciences, nec	77	74	76	80	77	71	74	72
Family and consumer sciences/human sciences ^b	ne	ne	ne	ne	ne	61	71	81
Mathematical sciences	412	412	419	419	424	418	447	450
Mathematics/applied mathematics	324	322	327	327	329	321	338	339
Statistics	88	90	92	92	95	97	109	111
Multidisciplinary/interdisciplinary studies ^b	ne	ne	ne	ne	ne	117	191	226
Neuroscience ^b	na	na	na	na	na	44	63	84
Physical sciences	597	595	604	606	610	608	627	640
Astronomy	38	39	41	41	43	43	46	46
Chemistry	281	281	285	288	289	289	294	297
Physics	250	250	251	250	251	252	260	262
Physical sciences, nec	28	25	27	27	27	24	27	35
Psychology	635	645	642	643	669	657	685	662
Clinical psychology	141	143	141	145	143	143	145	151
Psychology, general	191	191	192	192	191	188	194	189
Psychology, nec	303	311	309	306	335	326	346	322
Social sciences	1,446	1,474	1,491	1,494	1,588	1,556	1,629	1,646
Agricultural economics	58	57	57	57	56	54	53	55
Anthropology (cultural/social)	135	138	141	142	147	148	151	155
Economics	197	198	195	194	194	198	215	218
Geography	106	107	105	105	105	105	111	113
History and philosophy of science	26	27	31	33	33	30	32	30
Linguistics	72	74	73	75	79	74	80	80
Political science/public administration	371	379	381	379	397	390	387	389

TABLE A-2. Science, engineering, and health organizational units in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005 ^a	2006	2007old ^b	2007new ^b	2008	2009
Sociology	184	184	184	181	185	183	194	200
Sociology/anthropology	24	24	24	22	22	20	17	16
Social sciences, nec	273	286	300	306	370	354	389	390
Engineering	1,559	1,562	1,588	1,596	1,664	1,676	1,736	1,756
Aerospace engineering	55	54	55	57	58	58	56	58
Agricultural engineering	38	38	36	38	38	38	37	36
Architecture ^b	na	na	na	na	na	58	79	82
Biomedical engineering	95	97	101	110	116	117	128	137
Chemical engineering	145	146	148	147	149	149	150	148
Civil engineering ^b	260	267	272	269	290	243	247	251
Electrical engineering	258	259	266	261	271	270	272	265
Engineering science/engineering physics	41	38	38	38	37	37	40	43
Industrial/manufacturing engineering	175	172	172	169	172	170	168	157
Mechanical engineering	192	190	191	190	196	196	198	203
Metallurgical/materials engineering	113	113	113	115	117	119	125	129
Mining engineering	22	22	22	21	19	18	18	18
Nuclear engineering	23	23	23	23	26	24	25	25
Petroleum engineering	18	18	18	19	19	19	18	17
Engineering, nec	124	125	133	139	156	160	175	187
Health	3,021	2,988	3,014	2,953	2,741	2,694	2,765	2,674
Clinical medicine	2,052	2,000	2,001	1,937	1,739	1,693	1,767	1,757
Anesthesiology	89	88	88	88	72	72	68	65
Cardiology	69	62	60	56	46	46	54	52
Endocrinology	66	60	58	56	49	50	53	51
Gastroenterology	64	60	56	53	46	45	45	44
Hematology	66	60	57	53	43	43	42	41
Neurology ^b	174	172	175	178	177	127	122	117
Obstetrics/gynecology	86	84	84	83	68	67	68	69
Oncology/cancer research	89	90	94	94	91	91	94	101
Ophthalmology	75	73	72	69	57	56	55	58
Otorhinolaryngology	60	56	55	55	45	46	44	44
Pediatrics	109	105	103	95	86	86	84	85
Preventive medicine/community health	192	200	206	204	213	219	239	244
Psychiatry	103	101	101	99	84	81	81	75
Pulmonary disease	61	56	54	51	42	42	45	46
Radiology	123	116	118	112	98	97	100	106
Surgery	231	225	222	206	176	173	171	168
Clinical medicine, nec	395	392	398	385	346	352	402	391
Other health	969	988	1,013	1,016	1,002	1,001	998	917
Dental sciences	82	76	79	79	86	93	92	98
Nursing	186	191	197	197	178	178	171	149
Pharmaceutical sciences	90	94	93	93	91	95	103	105

TABLE A-2. Science, engineering, and health organizational units in doctorate-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005 ^a	2006	2007old ^b	2007new ^b	2008	2009
Communication disorders sciences	164	168	168	167	169	170	166	154
Veterinary sciences	71	72	79	79	73	86	84	86
Other health, nec	376	387	397	401	405	379	382	325

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a Includes organizational units at schools closed because of Hurricane Katrina.

^b In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-3. Science, engineering, and health organizational units in master's-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005 ^a	2006	2007old ^b	2007new ^b	2008	2009
All surveyed fields	1,412	1,410	1,391	1,374	1,349	1,419	1,393	1,420
Science and engineering	1,158	1,153	1,133	1,120	1,132	1,206	1,208	1,246
Science	977	969	960	942	962	1,032	1,029	1,058
Agricultural sciences	31	33	35	32	39	39	43	45
Biological sciences	158	157	157	159	162	163	159	167
Anatomy	0	0	0	0	0	0	0	0
Biochemistry	4	4	4	4	4	4	5	6
Biology	108	106	105	104	101	102	101	102
Biometry/epidemiology	0	0	0	0	0	0	1	3
Biophysics	0	0	0	0	0	0	0	0
Botany	2	2	2	2	2	2	1	1
Cell/molecular biology	3	3	4	5	4	4	5	6
Ecology	6	6	6	6	7	5	3	3
Entomology/parasitology	0	0	0	0	0	0	0	0
Genetics	2	2	2	2	2	2	2	0
Microbiology/immunology/virology	3	4	5	3	3	3	3	4
Nutrition	9	10	10	10	14	14	13	13
Pathology	0	0	0	0	0	0	0	0
Pharmacology	0	0	0	0	0	0	0	1
Physiology	4	4	4	5	5	5	6	5
Zoology	1	1	1	1	1	1	1	1
Biological sciences, nec	16	15	14	17	19	21	18	22
Communication ^b	ne	ne	ne	ne	ne	31	39	43
Computer sciences	96	98	99	101	102	100	104	112
Earth, atmospheric, and ocean sciences	58	56	56	55	55	53	52	52
Atmospheric sciences	1	1	1	1	1	1	1	1
Geosciences	29	27	27	25	25	27	29	27
Ocean sciences	5	5	5	5	6	6	6	6
Earth/atmospheric/ocean sciences, nec	23	23	23	24	23	19	16	18
Family and consumer sciences/human sciences ^b	ne	ne	ne	ne	ne	12	13	15
Mathematical sciences	78	77	76	75	75	75	72	73
Mathematics/applied mathematics	75	74	73	72	72	72	69	68
Statistics	3	3	3	3	3	3	3	5
Multidisciplinary/interdisciplinary studies ^b	ne	ne	ne	ne	ne	40	43	46
Neuroscience ^b	ne	ne	ne	ne	ne	1	1	2
Physical sciences	75	71	73	70	74	72	70	69
Astronomy	0	0	0	0	1	1	0	0
Chemistry	48	47	49	46	46	46	45	44
Physics	19	17	17	17	20	19	19	20
Physical sciences, nec	8	7	7	7	7	6	6	5
Psychology	208	204	205	199	199	197	192	186
Clinical psychology	33	32	33	31	34	31	35	32
Psychology, general	70	71	69	67	65	65	64	60
Psychology, nec	105	101	103	101	100	101	93	94
Social sciences	273	273	259	251	256	249	241	248
Agricultural economics	0	0	1	1	1	1	2	2
Anthropology (cultural/social)	12	13	12	12	13	13	14	14
Economics	25	24	21	20	20	20	20	21
Geography	23	23	22	21	23	23	23	22
History and philosophy of science	7	8	7	6	6	6	5	4
Linguistics	6	6	6	6	6	6	6	6
Political science/public administration	95	95	92	87	81	80	74	80

TABLE A-3. Science, engineering, and health organizational units in master's-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005 ^a	2006	2007old ^b	2007new ^b	2008	2009
Sociology	33	34	33	33	30	29	29	30
Sociology/anthropology	1	2	2	2	2	2	2	1
Social sciences, nec	71	68	63	63	74	69	66	68
Engineering	181	184	173	178	170	174	179	188
Aerospace engineering	3	3	3	3	3	3	3	3
Agricultural engineering	0	0	0	0	0	0	0	0
Architecture ^b	na	na	na	na	na	2	3	3
Biomedical engineering	3	3	3	3	3	3	1	2
Chemical engineering	7	6	6	6	5	5	5	7
Civil engineering ^b	27	28	27	27	30	29	31	32
Electrical engineering	46	46	42	44	41	43	46	50
Engineering science/engineering physics	4	4	3	3	4	5	6	5
Industrial/manufacturing engineering	32	33	32	34	30	31	30	31
Mechanical engineering	25	25	23	24	21	21	24	26
Metallurgical/materials engineering	3	2	2	2	2	2	2	1
Mining engineering	2	2	2	2	2	2	2	2
Nuclear engineering	0	0	0	0	0	0	0	0
Petroleum engineering	1	1	1	1	1	1	1	1
Engineering, nec	28	31	29	29	28	27	25	25
Health	254	257	258	254	217	213	185	174
Clinical medicine	22	24	24	24	31	31	28	27
Anesthesiology	4	4	4	4	3	3	3	2
Cardiology	0	0	0	0	1	1	1	1
Endocrinology	0	0	0	0	0	0	0	0
Gastroenterology	0	0	0	0	0	0	0	0
Hematology	0	0	0	0	0	0	0	0
Neurology ^b	0	0	1	1	1	0	0	0
Obstetrics/gynecology	0	0	0	0	0	0	0	0
Oncology/cancer research	0	0	0	0	1	1	1	1
Ophthalmology	0	0	0	0	0	0	0	0
Otorhinolaryngology	0	0	0	0	0	0	0	0
Pediatrics	0	0	0	0	0	0	0	0
Preventive medicine/community health	9	11	12	12	17	20	19	23
Psychiatry	1	1	0	0	0	0	0	0
Pulmonary disease	0	0	0	0	0	0	0	0
Radiology	1	1	1	1	0	0	0	0
Surgery	0	0	0	0	0	0	0	0
Clinical medicine, nec	7	7	6	6	8	6	4	0
Other health	232	233	234	230	186	182	157	147
Dental sciences	0	0	0	0	0	0	0	0
Nursing	79	80	83	83	57	57	49	37
Pharmaceutical sciences	1	1	1	1	1	1	2	3

TABLE A-3. Science, engineering, and health organizational units in master's-granting institutions, by detailed field: 2003–09

Field	2003	2004	2005 ^a	2006	2007old ^b	2007new ^b	2008	2009
Communication disorders sciences	57	57	55	54	57	57	52	53
Veterinary sciences	0	0	0	0	0	0	0	0
Other health, nec	95	95	95	92	71	67	54	54

na = not applicable; data were not collected at this level of detail. ne = not eligible; data were not collected for this field prior to 2007.

nec = not elsewhere classified.

^a Includes organizational units at schools closed because of Hurricane Katrina.

^b In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. "Architecture" is reported as a separate field of engineering in 2007new; these data were reported under "civil engineering" in 2007old and previous years. See appendix A, "Technical Notes," for more detail.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-4. Response rates for science, engineering, and health organizational units: 1975–2009

Year	Total	Complete response		Partial response		Nonresponse	
		Number	Percent	Number	Percent	Number	Percent
1975 ^a	9,162	8,998	98.2	NA	NA	164	1.8
1976	9,275	9,148	98.6	NA	NA	127	1.4
1977	9,513	9,432	99.1	NA	NA	81	0.9
1978 ^b	8,242	8,077	98.0	NA	NA	165	2.0
1979	9,796	9,446	96.4	NA	NA	350	3.6
1980	9,930	9,593	96.6	NA	NA	337	3.4
1981	9,917	8,594	86.7	613	6.2	710	7.2
1982	9,776	8,104	82.9	744	7.6	928	9.5
1983	9,663	8,070	83.5	816	8.4	777	8.0
1984	8,748	7,490	85.6	643	7.4	615	7.0
1985	9,025	7,818	86.6	672	7.4	535	5.9
1986	9,097	7,817	85.9	779	8.6	501	5.5
1987	9,254	8,030	86.8	715	7.7	509	5.5
1988	10,295	8,812	85.6	970	9.4	513	5.0
1989	10,318	8,908	86.3	891	8.6	519	5.0
1990	10,483	8,884	84.7	1,053	10.0	546	5.2
1991	10,705	9,052	84.6	1,186	11.1	467	4.4
1992	10,936	9,066	82.9	1,538	14.1	332	3.0
1993	11,146	9,156	82.1	1,555	14.0	435	3.9
1994	11,411	8,863	77.7	2,109	18.5	439	3.8
1995	11,598	9,514	82.0	1,730	14.9	354	3.1
1996	11,592	9,851	85.0	1,522	13.1	219	1.9
1997	11,597	9,720	83.8	1,665	14.4	212	1.8
1998	11,718	9,822	83.8	1,706	14.6	190	1.6
1999	11,833	9,396	79.4	2,289	19.3	148	1.3
2000	11,899	9,818	82.5	1,965	16.5	116	1.0
2001	11,967	10,121	84.6	1,731	14.5	115	1.0
2002	12,126	10,434	86.0	1,567	12.9	125	1.0
2003	12,261	10,343	84.4	1,709	13.9	209	1.7
2004 ^c	12,240	10,426	85.2	1,609	13.1	205	1.7
2004 ^d	12,240	10,524	86.0	1,474	12.0	242	2.0
2005 ^d	12,396	10,783	87.0	1,270	10.2	343	2.8
2006 ^d	12,320	10,814	87.8	1,177	9.6	329	2.7
2007 ^e	12,629	11,020	87.3	1,290	10.2	319	2.5
2008	13,166	11,574	87.9	1,436	10.9	156	1.2
2009	13,285	11,709	88.1	1,478	11.1	98	0.7

NA = not available; organizational units providing partial responses are included in complete response column prior to 1981 and reported separately beginning in 1981.

^a The 1976 survey also collected 1975 data from master's-granting institutions.

^b Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

^c Calculated using response-rate formula used through 2003. See appendix A, "Technical Notes."

^d Calculated using response-rate formula used from 2004 to 2006. Schools closed in 2005 because of Hurricane Katrina were counted as nonrespondents.

^e Calculated using response-rate formula implemented in 2007. See appendix A, "Technical Notes."

NOTE: Includes medical schools.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-5. Imputation for nonresponse in doctorate-granting institutions, by field and graduate enrollment or postdoctoral status: 2007–09

Year and field	Organizational units in universe	Total in survey			Number imputed			Imputation rate (%)		
		Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate
Fall 2009, all fields	11,865	428,856	145,027	57,714	5,209	2,396	1,066	1.2	1.7	1.8
Agricultural sciences	453	10,246	3,864	1,080	0	0	11	0.0	0.0	1.0
Biological sciences	2,227	59,235	9,345	20,125	628	164	307	1.1	1.8	1.5
Communication ^a	156	5,429	2,522	38	23	2	0	0.4	0.1	0.0
Computer sciences	422	29,669	15,924	591	695	465	18	2.3	2.9	3.0
Earth, atmospheric, and ocean sciences	388	11,211	2,731	1,420	177	108	34	1.6	4.0	2.4
Family and consumer sciences/human sciences ^a	81	1,903	1,181	22	0	0	0	0.0	0.0	0.0
Mathematical sciences	450	16,328	4,199	737	10	17	2	0.1	0.4	0.3
Multidisciplinary/interdisciplinary studies ^a	226	3,420	2,091	458	0	0	0	0.0	0.0	0.0
Neuroscience ^a	84	2,261	55	642	0	0	0	0.0	0.0	0.0
Physical sciences	640	33,671	3,427	7,424	53	28	106	0.2	0.8	1.4
Psychology	662	34,585	11,979	1,209	358	109	121	1.0	0.9	10.0
Social sciences	1,646	67,116	28,109	560	1,255	304	3	1.9	1.1	0.5
Engineering	1,756	101,495	35,227	6,411	1,358	582	121	1.3	1.7	1.9
Health fields ^a	2,674	52,287	24,373	16,997	652	617	343	1.2	2.5	2.0
Fall 2008, all fields	11,773	422,287	151,954	54,087	4,434	2,034	1,560	1.0	1.3	2.9
Agricultural sciences	438	9,564	3,535	1,146	11	7	22	0.1	0.2	1.9
Biological sciences	2,175	58,501	9,698	19,794	450	88	826	0.8	0.9	4.2
Communication ^a	142	4,642	2,388	32	0	0	0	0.0	0.0	0.0
Computer sciences	417	28,850	15,321	490	633	409	10	2.2	2.7	2.0
Earth, atmospheric, and ocean sciences	387	10,874	2,789	1,335	177	73	30	1.6	2.6	2.2
Family and consumer sciences/human sciences ^a	71	1,754	1,253	19	0	0	0	0.0	0.0	0.0
Mathematical sciences	447	15,636	4,086	723	9	5	5	0.1	0.1	0.7
Multidisciplinary/interdisciplinary studies ^a	191	2,818	1,868	348	0	0	0	0.0	0.0	0.0
Neuroscience ^a	63	1,908	72	343	0	0	14	0.0	0.0	4.1
Physical sciences	627	32,747	3,573	6,872	65	13	135	0.2	0.4	2.0
Psychology	685	35,866	12,561	1,070	648	235	141	1.8	1.9	13.2
Social sciences	1,629	64,107	27,577	506	273	64	11	0.4	0.2	2.2
Engineering	1,736	95,077	35,646	5,457	1,229	915	76	1.3	2.6	1.4
Health fields ^a	2,765	59,943	31,587	15,952	939	225	290	1.6	0.7	1.8
Fall 2007new, all fields	11,210	409,421	151,931	50,785	7,762	3,534	2,796	1.9	2.3	5.5
Agricultural sciences	393	9,276	3,272	985	168	114	1	1.8	3.5	0.1
Biological sciences	2,092	58,327	9,180	19,095	1,335	272	532	2.3	3.0	2.8
Communication ^a	119	4,049	1,977	30	0	1	0	0.0	0.1	0.0
Computer sciences	401	27,874	15,681	453	502	194	2	1.8	1.2	0.4
Earth, atmospheric, and ocean sciences	374	10,570	2,789	1,249	305	92	29	2.9	3.3	2.3
Family and consumer sciences/human sciences ^a	61	1,489	1,002	8	0	0	0	0.0	0.0	0.0
Mathematical sciences	418	15,013	4,167	624	148	151	2	1.0	3.6	0.3
Multidisciplinary/interdisciplinary studies ^a	117	2,076	1,617	244	1	6	0	*	0.4	0.0
Neuroscience ^a	44	1,529	32	285	0	0	0	0.0	0.0	0.0
Physical sciences	608	32,327	3,441	6,701	159	58	72	0.5	1.7	1.1

TABLE A-5. Imputation for nonresponse in doctorate-granting institutions, by field and graduate enrollment or postdoctoral status: 2007–09

Year and field	Organizational units in universe	Total in survey			Number imputed			Imputation rate (%)		
		Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate
Psychology	657	34,286	13,820	1,079	1,573	848	3	4.6	6.1	0.3
Social sciences	1,556	62,406	28,894	482	738	512	7	1.2	1.8	1.5
Engineering	1,676	90,911	33,512	4,937	954	334	9	1.0	1.0	0.2
Health fields ^a	2,694	59,288	32,547	14,613	1,879	952	2,139	3.2	2.9	14.6
Fall 2007old, all fields	10,976	403,722	148,110	50,657	7,761	3,527	2,796	1.9	2.4	5.5
Agricultural sciences	388	9,103	3,182	948	190	119	1	2.1	3.7	0.1
Biological sciences	2,101	58,011	9,256	19,204	1,313	267	507	2.3	2.9	2.6
Computer sciences	409	28,285	15,781	513	502	194	2	1.8	1.2	0.4
Earth, atmospheric, and ocean sciences	382	10,973	2,839	1,321	305	92	29	2.8	3.2	2.2
Mathematical sciences	424	15,311	4,229	621	148	151	3	1.0	3.6	0.5
Physical sciences	610	32,548	3,488	6,742	159	58	72	0.5	1.7	1.1
Psychology	669	34,801	13,972	1,097	1,573	848	3	4.5	6.1	0.3
Social sciences	1,588	63,564	29,319	494	738	512	7	1.2	1.7	1.4
Engineering	1,664	89,834	33,435	4,903	954	334	8	1.1	1.0	0.2
Health fields ^a	2,741	61,292	32,609	14,814	1,879	952	2,164	3.1	2.9	14.6

* = imputation rate < 0.05%.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more details.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-6. Imputation for nonresponse in master's-granting institutions, by field and graduate enrollment or postdoctoral status: 2007–09

Year and field	Organizational units in universe	Total in survey			Number imputed			Imputation rate (%)		
		Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate
Fall 2009, all fields	1,420	27,259	30,503	91	130	64	11	0.5	0.2	12.1
Agricultural sciences	45	577	513	3	0	0	0	0.0	0.0	0.0
Biological sciences	167	2,231	2,493	34	13	35	3	0.6	1.4	8.8
Communication ^a	43	662	805	0	0	0	0	0.0	0.0	0.0
Computer sciences	112	2,529	3,039	3	9	6	0	0.4	0.2	0.0
Earth, atmospheric, and ocean sciences	52	378	519	4	0	0	2	0.0	0.0	50.0
Family and consumer sciences/human sciences ^a	15	265	445	0	0	0	0	0.0	0.0	0.0
Mathematical sciences	73	557	1,142	0	0	0	0	0.0	0.0	0.0
Multidisciplinary/interdisciplinary studies ^a	46	537	509	1	0	0	0	0.0	0.0	0.0
Neuroscience ^a	2	0	40	3	0	0	0	0.0	0.0	0.0
Physical sciences	69	510	541	23	0	0	0	0.0	0.0	0.0
Psychology	186	5,788	3,832	10	0	0	6	0.0	0.0	60.0
Social sciences	248	4,453	8,142	1	18	7	0	0.4	0.1	0.0
Engineering	188	3,442	4,513	5	0	0	0	0.0	0.0	0.0
Health fields ^a	174	5,330	3,970	4	90	16	0	1.7	0.4	0.0
Fall 2008, all fields	1,393	27,326	29,922	77	831	716	8	3.0	2.4	10.4
Agricultural sciences	43	568	486	1	0	0	0	0.0	0.0	0.0
Biological sciences	159	2,161	2,306	33	21	43	3	1.0	1.9	9.1
Communication ^a	39	582	832	0	0	0	0	0.0	0.0	0.0
Computer sciences	104	2,488	2,894	3	56	40	0	2.3	1.4	0.0
Earth, atmospheric, and ocean sciences	52	297	429	4	9	0	1	3.0	0.0	25.0
Family and consumer sciences/human sciences ^a	13	182	360	0	0	0	0	0.0	0.0	0.0
Mathematical sciences	72	605	1,073	0	0	0	0	0.0	0.0	0.0
Multidisciplinary/interdisciplinary studies ^a	43	292	581	0	7	1	0	2.4	0.2	0.0
Neuroscience ^a	1	1	31	0	0	0	0	0.0	0.0	0.0
Physical sciences	70	507	492	13	0	0	0	0.0	0.0	0.0
Psychology	192	6,237	4,327	7	68	17	0	1.1	0.4	0.0
Social sciences	241	4,118	7,582	2	119	329	0	2.9	4.3	0.0
Engineering	179	3,178	3,955	5	33	40	0	1.0	1.0	0.0
Health fields ^a	185	6,110	4,574	9	518	246	4	8.5	5.4	44.4
Fall 2007new, all fields	1,419	27,944	30,203	55	1,064	895	6	3.8	3.0	10.9
Agricultural sciences	39	546	434	0	0	0	0	0.0	0.0	0.0
Biological sciences	163	2,101	2,324	14	68	39	2	3.2	1.7	14.3
Computer sciences	31	479	798	0	0	0	0	0.0	0.0	0.0
Communication ^a	100	2,208	2,483	3	65	82	0	2.9	3.3	0.0
Earth, atmospheric, and ocean sciences	53	322	419	1	9	0	0	2.8	0.0	0.0
Family and consumer sciences/human sciences ^a	12	105	184	0	0	0	0	0.0	0.0	0.0
Mathematical sciences	75	655	1,140	0	0	0	0	0.0	0.0	0.0
Multidisciplinary/interdisciplinary studies ^a	40	322	469	0	0	0	0	0.0	0.0	0.0
Neuroscience ^a	1	1	22	0	0	0	0	0.0	0.0	0.0
Physical sciences	72	530	526	18	7	4	0	1.3	0.8	0.0

TABLE A-6. Imputation for nonresponse in master's-granting institutions, by field and graduate enrollment or postdoctoral status: 2007–09

Year and field	Organizational units in universe	Total in survey			Number imputed			Imputation rate (%)		
		Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate	Full-time student	Part-time student	Post-doctorate
Fall 2009, all fields	1,420	27,259	30,503	91	130	64	11	0.5	0.2	12.1
Agricultural sciences	45	577	513	3	0	0	0	0.0	0.0	0.0
Biological sciences	167	2,231	2,493	34	13	35	3	0.6	1.4	8.8
Communication ^a	43	662	805	0	0	0	0	0.0	0.0	0.0
Computer sciences	112	2,529	3,039	3	9	6	0	0.4	0.2	0.0
Earth, atmospheric, and ocean sciences	52	378	519	4	0	0	2	0.0	0.0	50.0
Family and consumer sciences/human sciences ^a	15	265	445	0	0	0	0	0.0	0.0	0.0
Mathematical sciences	73	557	1,142	0	0	0	0	0.0	0.0	0.0
Multidisciplinary/interdisciplinary studies ^a	46	537	509	1	0	0	0	0.0	0.0	0.0
Neuroscience ^a	2	0	40	3	0	0	0	0.0	0.0	0.0
Physical sciences	69	510	541	23	0	0	0	0.0	0.0	0.0
Psychology	186	5,788	3,832	10	0	0	6	0.0	0.0	60.0
Social sciences	248	4,453	8,142	1	18	7	0	0.4	0.1	0.0
Engineering	188	3,442	4,513	5	0	0	0	0.0	0.0	0.0
Health fields ^a	174	5,330	3,970	4	90	16	0	1.7	0.4	0.0
Psychology	197	6,392	5,119	9	151	147	0	2.4	2.9	0.0
Social sciences	249	4,346	7,504	1	257	394	0	5.9	5.3	0.0
Engineering	174	3,402	3,851	5	1	13	0	*	0.3	0.0
Health fields ^a	213	6,535	4,930	4	506	216	4	7.7	4.4	100.0
Fall 2007old, all fields	1,349	27,138	28,853	55	1,064	895	6	3.9	3.1	10.9
Agricultural sciences	39	531	406	0	0	0	0	0.0	0.0	0.0
Biological sciences	162	2,082	2,314	14	68	39	2	3.3	1.7	14.3
Computer sciences	102	2,226	2,667	3	65	82	0	2.9	3.1	0.0
Earth, atmospheric, and ocean sciences	55	403	460	1	9	0	0	2.2	0.0	0.0
Mathematical sciences	75	655	1,140	0	0	0	0	0.0	0.0	0.0
Physical sciences	74	543	532	18	7	4	0	1.3	0.8	0.0
Psychology	199	6,365	5,146	9	151	147	0	2.4	2.9	0.0
Social sciences	256	4,420	7,568	1	257	394	0	5.8	5.2	0.0
Engineering	170	3,321	3,665	5	1	13	0	*	0.4	0.0
Health fields ^a	217	6,592	4,955	4	506	216	4	7.7	4.4	100.0

* = imputation rate < 0.05%.

^a In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. Science fields "communication" and "family and consumer sciences/human sciences" are newly eligible. Data for these two fields are only in 2007new. Science field "multidisciplinary/interdisciplinary studies" is also newly eligible; these data may have been reported under other fields before 2007. "Neuroscience" is reported as a separate field of science in 2007new; these data were reported under health field "neurology" in 2007old and previous years. See appendix A, "Technical Notes," for more details.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-7. Imputation rates of full-time graduate students in science, engineering, and health fields, by source and mechanism of support: 2009

Source of support	All sources	Federal								Nonfederal			Self-support
		HHS				Other				Domestic	Foreign	Institutional	
		DOD	DOE	NIH	Other	NASA	NSF	USDA	Other				
All sources, all students	1.2	11.9	2.0	6.6	5.2	11.4	5.0	3.5	5.2	8.9	7.8	7.3	10.9
Fellowship	7.1	2.5	2.6	4.7	8.3	7.9	4.2	0.0	4.3	9.1	15.0	7.3	na
Research assistantship	7.3	10.7	2.0	7.0	3.6	12.3	5.1	3.5	6.6	9.6	1.5	7.7	na
Teaching assistantship	6.8	na	1.4	na	0.0	4.3	7.5	6.5	1.7	9.8	1.9	6.8	na
Traineeship	8.7	8.3	0.0	6.5	7.6	0.0	5.3	30.0	4.2	8.6	29.3	12.9	na
Other support	10.5	22.2	2.4	2.6	1.8	5.1	5.1	2.2	2.5	5.5	4.8	8.0	10.9
All sources, female students	1.1	10.0	2.6	6.9	5.8	7.0	4.2	3.4	4.8	8.1	9.3	7.8	11.1

na = not applicable; question was not asked.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-8. Imputed full-time graduate students in science, engineering, and health fields, by source and mechanism of support: 2009

Source of support	All sources	Federal								Nonfederal			Self-support	
		HHS				Other								
		DOD	DOE	NIH	Other	NASA	NSF	USDA	Other	Domestic	Foreign	Institutional		
All sources, all students	5,339	1,032	93	1,739	115	276	1,079	95	662	2,042	311	13,025	18,491	
Fellowship	2,746	15	4	95	12	24	147	0	77	269	215	1,888	na	
Research assistantship	8,867	709	87	1,238	38	248	862	84	491	1,444	20	3,595	na	
Teaching assistantship	5,551	na	1	na	0	2	26	3	12	112	2	5,357	na	
Traineeship	1,122	9	0	381	63	0	31	6	27	46	24	535	na	
Other support	21,063	299	1	25	2	2	13	2	55	180	52	1,741	18,498	
All sources, female students	2,299	188	28	966	84	47	298	44	282	748	128	6,296	10,084	

na = not applicable; question was not asked.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = U.S. Department of Agriculture.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-9. Imputation rates of graduate students in science, engineering, and health fields, by citizenship, race/ethnicity, enrollment status, and sex: 2009

Citizenship and race/ethnicity	Part time			Full time			First-time, full-time enrolled		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All graduate students	1.4	1.5	1.6	1.2	1.4	1.1	1.8	1.6	2.0
U.S. citizens and permanent residents									
American Indian/Alaska Native	0.8	1.3	0.4	1.8	2.5	1.3	2.6	2.1	2.9
Asian/Pacific Islander	1.3	1.4	1.2	1.6	1.8	1.5	2.5	2.3	2.7
Black, non-Hispanic	2.3	2.2	2.4	1.7	2.0	1.5	2.1	1.9	2.2
Hispanic	1.5	1.4	1.5	1.4	1.8	1.1	1.9	1.6	2.1
White, non-Hispanic	1.6	1.4	1.8	1.6	1.8	1.4	1.8	1.4	2.1
Other or unknown	3.5	4.0	3.0	3.5	3.4	3.5	2.5	2.1	2.8
Temporary visa holders	1.2	1.1	1.6	1.0	1.0	1.0	1.7	1.7	1.7

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-10. Imputed graduate students in science, engineering, and health fields, by citizenship, race/ethnicity, enrollment status, and sex: 2009

Citizenship and race/ethnicity	Part time			Full time			First-time, full-time enrolled		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All graduate students	2,460	1,288	1,433	5,339	3,312	2,299	2,361	1,097	1,310
U.S. citizens and permanent residents									
American Indian/Alaska Native	8	6	2	37	21	16	15	5	10
Asian/Pacific Islander	160	91	69	435	226	209	202	89	113
Black, non-Hispanic	352	116	236	380	153	227	137	43	94
Hispanic	162	71	90	301	166	135	121	45	76
White, non-Hispanic	1,552	659	893	3,272	1,821	1,449	1,098	417	681
Other or unknown	588	344	245	997	475	522	228	93	135
Temporary visa holders	286	160	129	1,546	1,010	536	736	473	263

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-11. Imputation rates of postdoctorates in science, engineering, and health fields, by source of support, and imputation rates of nonfaculty research staff with doctorates: 2009

Status	Total	Women	With MD, DO, DDS, or DVM degree
Postdoctorates, all sources of support	1.9	2.6	6.4
Federal			
Fellowship	7.4	6.9	12.5
Research grant	6.8	8.1	16.7
Traineeship	9.6	7.9	14.1
Nonfederal	7.6	7.9	18.0
Foreign	3.3	3.0	9.2
Nonfaculty research staff with doctorates	2.0	2.5	3.3

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-12. Imputed postdoctorates in science, engineering, and health fields, by source of support, and imputed nonfaculty research staff with doctorates: 2009

Status	Total	Women	With MD, DO, DDS, or DVM degree
Postdoctorates, all sources of support	1,077	558	346
Federal			
Fellowship	179	75	32
Research grant	2,010	858	353
Traineeship	330	135	95
Nonfederal	1,703	668	422
Foreign	999	304	217
Nonfaculty research staff with doctorates	277	130	41

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering.

Appendix B. Survey Materials

- Worksheet for Survey of Graduate Students and Postdoctorates in Science and Engineering: Fall 2009
- Letter to School Coordinator
- 2009 GSS Code List
- Crosswalk between 2009 GSS Codes and 2000 National Center for Education Statistics (NCES) Classification of Instructional Programs (CIP) Codes



Worksheet for Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) Fall 2009

National Science Foundation (NSF) & National Institutes of Health (NIH)



Dear Colleague,

This document provides a worksheet and instructions to help you compile your answers to the NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). It is intended as an aid for use with the GSS Web survey. Please read page 2 for more information about preparing and submitting your information.

RTI International, the survey contractor for the GSS, provided the 2009 GSS survey materials to the individual selected as the coordinator for your school. Your school coordinator is responsible for monitoring your institution's responses to the survey and will be in touch with you about completing and submitting your survey response to NSF. Responses are due on **February 26, 2009**.

The GSS, conducted since 1966, is an annual survey that provides information on the training of the future labor force in the science, engineering, and health fields. Your timely response helps us minimize the cost of follow-ups and ensures that we accurately represent your institution in national statistical tables.

We appreciate the time and effort you devote to providing this important information.

**If you have questions, please e-mail RTI at gss@rti.org or call RTI toll-free at 1-866-558-0781.
Please submit the information on this worksheet via the Web survey at <http://www.gss2009.org>.**

Sincerely,

A handwritten signature in black ink that reads "Lynda Carlson".

Lynda Carlson, Ph.D
Director
Division of Science Resources Statistics
National Science Foundation

A handwritten signature in black ink that reads "Rodney Ulane".

Rodney Ulane, Ph.D
NIH Research Training Officer
Director, Division of Scientific Programs
Office of the Director
National Institutes of Health

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information provided will be used for statistical purposes only. Response is entirely voluntary, and failure to provide some or all of the information will in no way adversely affect your institution. The average time required for questionnaire completion is 2.3 hours. Response burden comments should be directed to Suzanne Plimpton, Reports Clearance Officer, NSF, via e-mail at splimpto@nsf.gov or call 703-292-7556. You may contact the survey director at the National Science Foundation, Susan Hill, at sthill@nsf.gov.

Form approved
OMB No. 3145-0062
Expires 10/31/2011

RTI International, Contractor for GSS

3040 East Cornwallis Road, P.O. Box 12194, Research Triangle Park, NC 27709-2194 • gss@rti.org • toll-free: (866) 558-0781

Survey Information

We ask for counts of the following information by organizational unit (unit):

- **Graduate Students**
 - Part-time graduate students by demographics, including citizenship, ethnicity, race, and sex
 - Full-time graduate students by demographics, including citizenship, ethnicity, race, and sex
 - Full-time graduate students by financial support, including agency (e.g. NSF, NIH) and mechanism (e.g. training grant, fellowship)
- **Postdocs**
 - By citizenship and sex
 - By mechanism (e.g. training grant, fellowship)
 - By type of degree (professional or PhD or PhD equivalent)
- **Nonfaculty Researchers**
 - By sex

If you need additional copies of this worksheet, please visit the GSS Web survey site <http://www.gss2009.org> to download additional copies.

For **Glossary** terms used in the GSS, please refer to the Glossary starting on page 8. Hovering the mouse pointer over the term will automatically bring up the definition on the GSS Web survey.

Submissions

Deadline

Submit the data to NSF by February 26, 2009.

Online Submissions

This worksheet is designed to aid you in gathering information for entry on the GSS Web survey.

- Use the GSS Web survey to report and submit the information on this worksheet for each organizational unit identified by your school coordinator
- Access the GSS Web survey at <http://www.gss2009.org>, using the ID and password you received by e-mail
- If you've lost the ID and password sent by your school coordinator or you have not yet received an ID and password, please contact the survey help desk toll-free at 866-558-0781, or e-mail us at gss@rti.org

Paper Submissions

- If reporting online is not possible, your school coordinator may ask you to provide your answers on this worksheet and return it to his or her office for submission to RTI
- If your postdoc coordinator asks you to return your survey response directly by mail, please send it to RTI at the address listed on the bottom of the cover sheet

1

A. What is the name of this organizational unit?

This information (provided by your school coordinator) is automatically filled on the GSS Web survey pages.

Organizational units ("units") include teaching units (departments or programs) and research units (research centers or health care facilities). This term replaces terms used previously: department, program, research center, health care facility.

Important

- Report clinical psychology separately from all other psychology department or programs
- Report computer science separately from mathematics
- Report each engineering field (e.g., electrical engineering, mechanical engineering) separately

Please contact your school coordinator if you think more organizational units should be specified for your survey response. The school coordinator will adjust the GSS Web survey accordingly.

B. Who is the primary contact for your organizational unit, or the person assigned to complete this survey response?

Institution name	
First name	
Last name	
Title	
Telephone	
Telephone extension	
E-mail	

C. Who is the alternative contact if the primary contact is not available? Examples include your supervisor, the data preparer, or another coworker

First name	
Last name	
Title	
Telephone	
Telephone extension	
E-mail	

D. As of fall 2009, what is the highest graduate degree offered by this organizational unit?

- PhD or equivalent, such as ScD or DEng
(exclude EdD, MD, or other professional degrees) → Continue with Question **[2]**
- Master's degree (exclude certificates) → Continue with Question **[2]**
- No PhD or master's degree offered → Skip to Question **[5]**

2

How many graduate students were enrolled *part-time* for credit in this organizational unit in fall 2009 in each category below? Use your institution's definition of part-time. (Full-time is collected in Question 3)

Check this box if this unit had no eligible part-time graduate students, and then skip to Question **3**

Note

- Count only students enrolled **part-time** for credit in a graduate-degree program in science, engineering, or health
- Count students enrolled in more than one organizational unit in only one home unit

Include

- Part-time students doing thesis or dissertation research
- Part-time students pursuing a master's, PhD, or equivalent degree such as an ScD or DEng
- Part-time master's or PhD candidates (including residents and interns) concurrently enrolled in a professional degree program (e.g., MD, DDS, DO, DPT, DVM) **or** a joint medical/PhD program
- Part-time students who already hold a graduate or professional degree **and** are seeking an additional degree in a master's or PhD program

Exclude

- Graduate students enrolled at a branch or extension center of a U.S. institution in a foreign country

Citizenship, Ethnicity, and Race

- Count any student who is Hispanic/Latino or Hispanic/Latino and any other race in Row B. See the Glossary (p. 8) for full definitions of citizenship, ethnicity, and race categories.

Citizenship, ethnicity, and race of part-time students (report students in whole numbers)	Part-time graduate students		
	Male 1	Female 2	Total¹ 3
Foreign nationals holding temporary visas, regardless of ethnicity or race A			
U.S. citizens and permanent residents (non-U.S. citizens holding green cards)			
• Hispanic/Latino ethnicity (one or more races) B			
• Non-Hispanic/Latino (one or more races)			
One race, American Indian/Alaska Native C			
One race, Asian D			
One race, Black/African American E			
One race, Native Hawaiian/Other Pacific Islander F			
One race, White G			
More than one race (non-Hispanic/Latino) H			
• Ethnicity/race unknown or not stated I			
Total part-time students (sum Rows A–I)¹ J			

Please explain significant differences from the 2007 survey or provide other comments here

¹ Row and column totals are calculated automatically if you report via the GSS Web survey

3

How many graduate students were enrolled ***full-time*** for credit in this organizational unit in fall 2009 in each category below? Of these, how many full-time students were enrolled for the ***first time***? Use your institution's definition of full-time.

Check this box if this unit had no eligible full-time graduate students, and then skip to Question **5**

Note

- Count only students enrolled ***full-time*** for credit in a graduate-degree program in science, engineering, or health
- Count students enrolled in more than one organizational unit in only one home unit

Include

- Full-time students doing thesis or dissertation research
- Full-time students pursuing a master's, PhD, or equivalent degree, such as an ScD or DEng
- Full-time master's or PhD candidates (including residents and interns) concurrently enrolled in a professional degree program (e.g., MD, DDS, DO, DPT, DVM) **or** a joint medical/PhD program
- Full-time students who already hold a graduate or professional degree **and** are seeking an additional degree in a master's or PhD program

Exclude

- Graduate students enrolled at a branch or extension center of a U.S. institution in a foreign country

First-time enrollment for full-time students

- First-time students are those enrolled for credit in a graduate-degree program in ***this unit*** for the first time in fall 2009. This may include graduate students previously enrolled in another graduate degree program at your institution or at another institution and students that already hold another graduate or professional degree.

Citizenship, Ethnicity, and Race

- Count any student who is Hispanic/Latino or Hispanic/Latino and any other race in Row B. See the Glossary (p. 8) for full definitions of citizenship, ethnicity, and race categories.

Consistency checks: Row J, Column 1 = Question 4, Row M, Column 7 (total full-time male graduate students)
Row J, Column 2 = Question 4, Row M, Column 8 (total full-time female graduate students)
Row J, Column 3 = Question 4, Row M, Column 6 (total full-time graduate students)

Citizenship, ethnicity, and race of full-time students (report students in whole numbers)	Full-time graduate students					
	Total full-time			Of Col. 3 total, how many are first time?		
	Male 1	Female 2	Total ¹ 3	Male 4	Female 5	Total ¹ 6
Foreign nationals holding temporary visas, regardless of ethnicity or race	A					
U.S. citizens and permanent residents (non-U.S. citizens holding green cards)						
• Hispanic/Latino ethnicity (one or more races)	B					
• Non-Hispanic/Latino (one or more races)						
One race, American Indian/Alaska Native.....	C					
One race, Asian.....	D					
One race, Black/African American.....	E					
One race, Native Hawaiian/Other Pacific Islander	F					
One race, White	G					
More than one race (non-Hispanic/Latino)	H					
• Ethnicity/race unknown or not stated	I					
Total full-time students (sum Rows A–I)¹	J					

Please explain significant differences from the 2008 survey or provide other comments here

¹ Row and column totals are calculated automatically if you report via the GSS Web survey

4

How many graduate students enrolled ***full-time*** for credit in this organizational unit in fall 2009 received their largest source of financial support from each category below? Report students by mechanism of support and by sex. Use your institution's definition of full-time.

Check this box if this unit had no eligible full-time graduate students, and then skip to Question **5**

Note

- Count only students enrolled ***full-time*** for credit in a graduate-degree program in science, engineering, or health
- Count students enrolled in more than one organizational unit in only one home unit
- If a student receives support from two or more sources equally, select one to report as the primary source
- See the Glossary (p. 8) for definitions of terms used in Question 4

Include

- Full-time graduate students doing thesis or dissertation research
- Full-time students pursuing a master's, PhD, or equivalent degree, such as an ScD or DEng
- Full-time master's or PhD candidates (including residents and interns) concurrently enrolled in a professional degree program (e.g., MD, DDS, DO, DPT, DVM) **or** a joint medical/PhD program
- Full-time students who already hold a graduate or professional degree **and** are seeking an additional degree in a master's or PhD program

Exclude

- Full-time graduate students enrolled at a branch or extension center of a U.S. institution in a foreign country

Consistency checks: Row M, Column 6 = Question 3, Row J, Column 3 (total full-time graduate students)
 Row M, Column 7 = Question 3, Row J, Column 1 (total full-time male graduate students)
 Row M, Column 8 = Question 3, Row J, Column 2 (total full-time female graduate students)

Largest source of financial support (use all graduate academic support: tuition reimbursement, waivers, stipends, etc., to determine largest source)	Full-time graduate students						Total by Sex (must sum to total in Column 6)	
	Largest Mechanism of Financial Support (report students in whole numbers)					Total ¹ 6		
	Fellowships 1	Trainee-ships 2	Research assistantships 3	Teaching assistantships 4	Other support 5	Male 7	Female 8	
Federal (e.g., training grants from federal agencies; however, federal loans are reported in Row L)								
• Department of Defense A								
• HHS-NIH Only..... B								
• HHS-Other than NIH C								
• NSF D								
• Department of Agriculture..... E								
• NASA F								
• Department of Energy G								
• Other federal sources ² H								
Nonfederal (<i>Institutional</i> means the support from your institution: tuition reimbursement, waivers, stipends, etc.)								
• Institutional, state/local government I								
• Other U.S. sources..... J								
• Non-U.S. sources K								
Self (<i>Student's own resources</i> means the personal and family financial resources and federal and other loans)								
• Student's own resources L	Report in "Other Support" and by sex:							
Total (sum Rows A-L) ¹ M								
Please explain significant differences from the 2008 survey or provide other comments here								

¹ Shaded row and column totals will be automatically calculated if you are responding via the GSS Web survey² This also includes the Fulbright Program (State Department) and the GI Bill (Department of Veterans Affairs)

5**In fall 2009, how many postdoctoral researchers (postdocs) and other doctorate-holding nonfaculty researchers did this organizational unit have in the categories below?**

- Check this box if this unit had no postdocs or other doctorate-holding nonfaculty researchers
 Check this box if this unit had postdocs and/or other doctorate-holding nonfaculty researchers for which you cannot report complete data

Count individuals with appointments in more than one organizational unit in only one home unit.**Postdocs are defined as meeting both of the following qualifications:**

- (1) Holds a recent doctoral degree, generally awarded within the last 5 years
 - PhD or equivalent such as an ScD or DEng **or**
 - First professional degree in a medical or related field (MD, DDS, DO, DVM) **or**
 - Foreign equivalent to a U.S. doctoral degree
- (2) Has a limited-term appointment, generally no more than 5–7 years
 - Primarily for training in research or scholarship **and**
 - Working under the supervision of a senior scholar in a unit affiliated with **your** institution

Include

- Postdocs who are U.S. citizens, residents of Puerto Rico and the U.S. territories, permanent residents holding green cards, and foreign nationals holding temporary visas
- Postdocs appointed by your organizational unit who work in other units at your institution
- Clinical fellows if the primary purpose of the appointment is research training under the supervision of a senior scholar

Exclude

- Postdocs with appointments in residency training programs in medical and health professions

Doctorate-holding nonfaculty researchers (U.S. and foreign) to be included:

- Those not considered postdoctoral researchers or members of the faculty **and**
- Who are involved principally in research activities

Sources of Support

- See the Glossary (p. 8) for definitions of sources of financial support

Postdocs by support and citizenship, and other doctorate-holding nonfaculty research staff (report individuals in whole numbers)	Sex and selected degree field			
	Male 1	Female 2	Total ¹ 3	Of the total in Col. 3, how many have an MD, DO, DDS, or DVM? 4
Postdocs by largest mechanism of support				
• Federal fellowship	A			
• Federal traineeship	B			
• Federal research grant	C			
• Nonfederal sources	D			
Total postdocs (sum Rows A–D)¹	E			
• Of the total postdocs (Row E), how many are foreign nationals holding temporary visas	F			
Doctorate-holding nonfaculty researchers	G			

Please explain significant differences from the 2008 survey or provide other comments here¹ Shaded row and column totals will be automatically calculated if you are reporting via the GSS Web survey

Glossary

Citizenship (Questions 2, 3, and 5)—Count individuals as either U.S. citizens and permanent residents or as foreign nationals holding temporary visas. Do not count foreign students living outside the United States.

- **U.S. Citizens and Permanent Residents**—U.S. citizens, including those from Puerto Rico and the U.S. territories, and permanent residents holding green cards.
- **Foreign Nationals Holding Temporary Visas (Questions 2, 3, and 5)**—Individuals in the United States on temporary visas. Individuals who are native residents of Puerto Rico or a U.S. territory, or permanent residents holding green cards, should be included under U.S. citizens and permanent residents. Non U.S. citizens without temporary visas who reside outside the U.S. and who are enrolled in an on-line degree program at a U.S. institution should be excluded. Do not report foreign nationals by ethnicity or race.

Department of Agriculture (Question 4)—Financial support from the U.S. Department of Agriculture (USDA) includes research assistants working on projects financed out of agency formula funds, competitive research grants, and institutional fellowship and training grants.

Department of Defense (Question 4)—Financial support from the U.S. Department of Defense (DoD), including the Departments of the Army, Navy, and Air Force, as well as other programs within DoD.

Department of Energy (Question 4)—Financial support from U.S. Department of Energy (DOE) research grants, including those supported by grants at the DOE National Laboratories.

Doctorate-Holding Nonfaculty Researchers (Question 5)—All doctorate-holding researchers who (a) are not considered either postdoctoral researchers or members of the faculty and (b) are involved principally in science and engineering or health research activities.

Ethnicity (Questions 2 and 3)—The U.S. Office of Management and Budget defines ethnicity separately from race (please see separate entry for Race). In this survey, ethnicity refers to whether an individual is of Hispanic or Latino descent—a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. Also see Hispanic/Latino ethnicity, one or more races.

Federal Fellowships (Question 5)—A Federal fellowship is any competitive award from the U.S. government (often from a national competition) given to a postdoc that requires no work of the recipient.

Federal Research Grants (Question 5)—Grants from any agency, office, or department of the U.S. government that supports specific research goals. See Nonfederal Sources of Support.

Federal Sources of Support for Graduate Students (Question 4)—Graduate student financial support provided by the federal agencies listed in Question 4, Rows A–G. Count students primarily supported by federally guaranteed student loans (student's own resources) as self-supported. See additional entries for the Department of Defense, the National Institutes of Health, the Health and Human Services, the National Science Foundation, the Department of Agriculture, and the Department of Energy.

Federal Traineeships (Question 5)—Educational award from the U.S. government given to a postdoc selected by the institution.

Fellowships (Question 4)—A competitive award (often from a national competition) to a graduate student that requires no work of the recipient.

First-Time Enrollment (Question 3)—The definition for first-time students in Question 3 has been clarified: ***First-time graduate students*** are those enrolled for credit in a graduate-degree program in your organizational unit for the first time in fall 2009. This may include graduate students previously enrolled in another graduate degree program at your institution or at another institution. It may also include students that already hold another graduate or professional degree. Only count full-time, first-time students in these columns.

Foreign Nationals Holding Temporary Visas (Questions 2, 3, and 5)—Individuals in the United States on temporary visas. Individuals who are native residents of Puerto Rico or a U.S. territory, or permanent residents holding green cards, should be included under U.S. citizens and permanent residents. Non-U.S. citizens without temporary visas who reside outside the U.S. and who are enrolled in an on-line degree program at a U.S. institution should be excluded. Do not report foreign nationals by ethnicity or race.

Full-Time Graduate Student (Questions 3 and 4)—Use your institution's policy and definition to count full-time students.

GSS (Survey of Graduate Students and Postdoctorates in Science and Engineering)—An annual survey collecting information about graduate enrollment, postdoctoral researchers, and doctorate-holding nonfaculty researchers in science, engineering, and selected health fields. Jointly sponsored by NSF and NIH, the GSS provides a comprehensive picture of the training of future scientists, engineers, and health professionals in U.S. graduate schools.

Health and Human Services (HHS) (Question 4)—Report financial support from the institutes or divisions of the National Institutes of Health (NIH) in Row B. Report support from all other components of the U.S. Department of Health and Human Services (HHS) under Row C. See HHS–National Institutes of Health (NIH) Only and HHS–Other than NIH.

HHS–National Institutes of Health (NIH) Only (Question 4, Row B)—Financial support received from the following organizations within the National Institutes of Health (NIH):

- John E. Fogarty International Center
- National Cancer Institute
- National Center for Complementary and Alternative Medicine
- National Center on Minority Health and Health Disparities
- National Center for Research Resources
- National Eye Institute
- National Heart, Lung, and Blood Institute
- National Human Genome Research Institute
- National Institute of Allergy and Infectious Diseases
- National Institute of Arthritis and Musculoskeletal and Skin Diseases
- National Institute of Biomedical Imaging and Bioengineering
- National Institute of Child Health and Human Development
- National Institute of Dental and Craniofacial Research
- National Institute of Diabetes and Digestive and Kidney Diseases
- National Institute of Environmental Health Sciences
- National Institute of General Medical Sciences
- National Institute of Mental Health
- National Institute of Neurological Disorders and Stroke
- National Institute of Nursing Research

HHS–National Institutes of Health (NIH) continued

- National Institute on Aging
- National Institute on Alcohol Abuse and Alcoholism
- National Institute on Deafness and Other Communication Disorders
- National Institute on Drug Abuse
- National Library of Medicine

HHS–Other than NIH (Question 4)—Other than NIH, the U.S. Department of Health and Human Services (HHS) includes the following organizations:

- Agency for Healthcare Research and Quality
 - Centers for Disease Control and Prevention
 - Health Resources and Services Administration
 - National Institute for Occupational Safety and Health
 - Substance Abuse and Mental Health Services Administration
 - U.S. Food and Drug Administration
- Highest Degree Offered (Question 1d)**—The highest degree granted (master's or PhD) by the organizational unit.

Hispanic/Latino Ethnicity, one or more races

(Questions 2 and 3, Row B)—Only report ethnicity for U.S. citizens (including those from Puerto Rico and U.S. territories). All foreign nationals holding temporary visas should be reported in Row A. Include all students of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. Count all students who are Hispanic/Latino or Hispanic/Latino and any other race(s) in this category.

ID—A unique identification assigned to each user for the purpose of logging into the GSS online data collection system.

Institutional/State and Local Government Support (Question 4)—Financial support (such as stipends or tuition) provided by the institution or state or local governments. This category includes students receiving tuition waivers.

Largest or Primary Source of Support (Questions 4 and 5)—The source of funds that provides the largest amount (highest percentage) of financial support for each graduate student (or postdoc). When determining the largest source of support for graduate students, consider all graduate school academic expenses (tuition, fees, etc.). If a student or postdoc is supported by two or more equal sources of support, select one as the primary.

(continued at top of next column)

National Aeronautics and Space Administration (NASA) (Question 4)—Report in Question 4, Column F, students who receive financial aid from this agency.

National Science Foundation (NSF) (Question 4)—

Financial support from the U.S. National Science Foundation (NSF) graduate fellowships and traineeships, as well as support under NSF research grants.

Nonfederal support (Questions 4 and 5)—Support from state and local government; support from **your** institution, such as tuition waivers and stipends; support from foreign sources, such as foreign governments, foreign firms, and agencies of the United Nations; and other U.S. sources, such as support from nonprofit institutions, private industry, and all other nonfederal U.S. sources.

Non-Hispanic/Latino ethnicity (Questions 2 and 3)—Count only students who are **not** of Hispanic or Latino descent in rows C-I. Students who are Hispanic/Latino or Hispanic/Latino and any other race should be counted in Row B.

- **One race, American Indian or Alaska Native**—A person of only one race having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment
- **One race, Asian**—A person of only one race having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam
- **One race, Black or African American**—A person of only one race having origins in any of the black racial groups of Africa
- **One race, Native Hawaiian or Other Pacific Islander**—A person of only one race having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific islands
- **One race, White**—A person of only one race having origins in any of the original peoples of Europe, the Middle East, or North Africa
- **More than one race reported (non-Hispanic/Latino)**—Students reporting two or more of the race categories listed above. Students who report being Hispanic/Latino and one or more race, should be reported in Row B instead.

Non-U.S. sources (Question 4)—Funding from non-U.S. sources, including foreign governments, foreign companies, and specialized agencies of the United Nations.

Organizational Unit (Unit)—This term refers to the names of the organizational units where graduate students, postdoctoral researchers, and doctorate-holding nonfaculty researchers are enrolled and/or work. A unit can be a teaching unit, research unit, or both a teaching and research unit. Also see Research Unit and Teaching Unit.

Other Federal sources (Question 4)—Financial support from U.S. federal agencies not listed in Question 4, Rows A–G. Examples are the Fulbright program (State Department), the G.I. Bill (Department of Veterans Affairs) and various programs in the Department of Education.

Other support (Question 4)—All other mechanisms of support for full-time students, including self-supported students and members of the Armed Forces whose tuition is paid by the U.S. Department of Defense.

Other U.S. sources (Question 4)—Financial support from industrial firms, nonprofit institutions (e.g., independent research institutes, professional societies, philanthropic foundations), and all other sources of support originating within the United States. It does not include loans, family money, personal savings used by students supporting themselves, or federal or academic institutional sources of support.

Part-Time Graduate Student (Question 2)—Use your own institution’s policy and definition to count part-time students.

Password—Used with the user ID for the purpose of logging into the GSS Web survey. The password may be changed by the user by clicking on “Change password” in the menu at the top of the screen. The new password must be at least 8 characters in length and include a combination of upper- and lowercase letters, numbers, and symbols. School coordinators can resend password and ID information to unit respondents on the Send or Resend ID/Password screen. See ID.

Postdoctoral Researcher or Postdoc (Question 5)—A postdoc is defined as meeting both of the following qualifications:

1. Holds a recent doctoral degree, generally awarded within the last 5 years, such as
 - PhD or equivalent (e.g., ScD or DEng) **or**
 - First professional degree in a medical or related field (MD, DDS, DO, DVM) **or**
 - Foreign degree equivalent to a U.S. doctoral degree
2. Has a limited-term appointment, generally no more than 5–7 years
 - Primarily for training in research or scholarship **and**
 - Working under the supervision of a senior scholar in a unit affiliated with your institution

Puerto Rico and U.S. Territories—U.S. territories include American Samoa, Guam, Federated States of Micronesia, the Northern Marianas, and the U.S. Virgin Islands.

Race (Questions 2 and 3)—Only report race for U.S. citizens (including those from Puerto Rico and U.S. territories) and permanent residents. All foreign nationals holding temporary visas should be reported in Row A. The U.S. Office of Management and Budget defines race separately from ethnicity (please see entry for Ethnicity and Hispanic/Latino). The GSS survey uses the following definitions of race:

- **One race, American Indian or Alaska Native**—A person of only one race having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment
- **One race, Asian**—A person of only one race having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam
- **One race, Black or African American**—A person of only one race having origins in any of the black racial groups of Africa
- **One race, Native Hawaiian or Other Pacific Islander**—A person of only one race having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific islands
- **One race, White**—A person of only one race having origins in any of the original peoples of Europe, the Middle East, or North Africa
- **More than one race reported (non-Hispanic/Latino)**—Students reporting two or more of the race categories listed above. Students who report being Hispanic/Latino and one or more race, should be reported in Row B instead.

Race/ethnicity unknown or not stated (Questions 2 and 3, Row I)—Use this category if neither the race nor the ethnicity of the student is known. If the race is known, but the ethnicity is unknown, report the student by race. If the student is Hispanic or Latino but the race is unknown, report the student as Hispanic/Latino.

Research Assistantships (Question 4)—A financial award given to a graduate student where most of the student's responsibilities are devoted primarily to research assistant activities.

Research Unit—Research centers, health care facilities, and other organizations at the academic institution that appoint postdoctoral researchers and/or employ doctorate-holding nonfaculty researchers. Also see Organizational Unit and Teaching Unit.

School Coordinator—Person responsible for completing the GSS for the entire school or a portion of the institution.

Self-Support (Question 4)—Report students primarily supported by loans (including federal loans) or personal or family financial contributions.

Student's own resources (Question 4)—The personal and family financial resources and federal and other loans.

Teaching Assistantships (Question 4)—A financial award given to a graduate student where most of the student's responsibilities are devoted primarily to teaching assistant activities.

Teaching Unit—Grants graduate-level research-oriented degrees including master's or PhD or equivalent degrees (i.e., ScD, DEng). Do not include units that grant only professional degrees. Also see Research Unit and Organizational Unit.

Traineeships (Question 4)—A financial award given to a student selected by the institution.

Unit—See Organizational Unit.

Unit Respondent—Person(s) responsible for reporting unit data to the School Coordinator.

U.S. Citizens and Permanent Residents—U.S. citizens, including those from Puerto Rico and the U.S. territories, and permanent residents holding green cards.

THANK YOU

Please submit the information on this worksheet via the GSS Web survey at
<http://www.gss2009.org>

Or, return your completed worksheet(s) to your school coordinator in time to meet
NSF's February 26, 2009 deadline

If your school coordinator asks you to return your worksheet(s) directly by mail, please
send to:

NSF-NIH Graduate Student Survey
c/o RTI International
3040 Cornwallis Rd, P.O. Box 12194
Research Triangle Park, NC 27709-2194

Questions?

Call Jamie Friedman toll-free at 1-866-558-0781
or e-mail us at gss@rti.org



Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) Fall 2009

National Science Foundation (NSF) & National Institutes of Health (NIH)



October 21, 2009

Dear <School Coordinator Name>:

The National Science Foundation (NSF) and the National Institutes of Health (NIH) announce the opening of the Web site for the fall 2009 *NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering* (GSS). You have been identified as the GSS school coordinator for <Inst/School name>. If you are not the coordinator, or think you have received this material in error, please call us toll-free at (866) 558-0781. Note that GSS tables that display data by institution will not list your institution if it does not respond to the survey. For nonresponding institutions, estimated data will only be included in aggregated totals.

- Information you need to start the 2009 GSS Web survey:
Website: <http://www.gss2009.org>
User ID: <USERID>
Password: <PW>
- Printed copies of the 2009 GSS Worksheet, Code List, and Crosswalk are enclosed
- Important Dates:
November 30, 2009 Update list of organizational units
February 26, 2010 Submit completed survey information

As the school coordinator, you will use the GSS Web survey to:

- Identify the organizational units at your school with graduate students, postdoctorates, and/or doctorate-holding nonfaculty researchers in the **fall 2009 enrollment period** (science, engineering, and selected health fields only)
- Decide who completes the information for each organizational unit
- Monitor reporting progress to ensure that all organizational units report by the due date

For questions about the survey process, please contact Ms. Jamie Friedman, RTI International, toll-free at (866) 558-0781 or gss@rti.org. For other concerns, please contact Susan T. Hill, NSF Project Officer, at (703) 292-7790 or sstill@nsf.gov.

Thank you for your efforts to provide timely and accurate statistics to NSF and NIH. The data you provide on graduate students and postdocs is used by the graduate education community, Federal agencies and science policymakers throughout the nation.

Sincerely,

A handwritten signature in black ink that reads "Lynda G. Carlson".

Lynda Carlson, Ph.D
Director
Division of Science Resources Statistics
National Science Foundation

A handwritten signature in black ink that reads "Rodney Ulane".

Rodney Ulane, Ph.D
NIH Research Training Officer
Director, Division of Scientific Programs
Office of the Director
National Institutes of Health

Enclosures

RTI International, Contractor for GSS

3040 East Cornwallis Road, P.O. Box 12194, Research Triangle Park, NC 27709-2194 • gss@rti.org • toll-free: (866) 558-0781

**Survey of Graduate Students and Postdoctorates in
Science and Engineering (GSS) Fall 2009**

National Science Foundation (NSF) & National Institutes of Health (NIH)

**2009 GSS Code List
Complete List of GSS Eligible Fields and Codes**

Contents:

Agricultural Science Fields	1
Architecture Fields.....	2
Biological Science Fields.....	2
Communication Fields.....	3
Computer Science Fields	3
Earth, Atmospheric, and Ocean Science Fields.....	3
Engineering Fields.....	3
Family and Consumer Sciences/Human Sciences Fields	4
Health Fields	4
Mathematical Science Fields.....	6
Neuroscience Fields.....	6
Physical Science Fields.....	6
Psychology Fields	7
Social Science Fields	7
Multidisciplinary/Interdisciplinary Studies.....	8

Do not include certificate programs or units that only award professional degrees, such as PharmD, PsyD, AuD, DDS, DPT, JD, or MD.

Field	GSS Code	Additional Program Titles	
Agricultural Science Fields (see also 102 and 901)			
Agricultural Economics	901	Natural Resource Economics	
Agricultural Sciences	501	Agricultural and Horticultural Plant Breeding Agricultural Animal Breeding Agriculture, Agriculture Operations and Related Sciences Agronomy and Crop Science Animal Health Animal Nutrition Animal Sciences Dairy Science Environmental Science Environmental Studies Fishing and Fisheries Sciences and Management Food Science Food Science and Technology Food Technology and Processing Forest Management/Forest Resources Management Forest Resources Production and Management Forest Sciences and Biology Forestry	Horticultural Science International Agriculture Land Use Planning and Management/Development Livestock Management Natural Resources Management and Policy Natural Resources/Conservation Ornamental Horticulture Plant Protection and Integrated Pest Management Plant Sciences Poultry Science Range Science and Management Soil Chemistry and Physics Soil Microbiology Soil Science and Agronomy Soil Sciences Urban Forestry Water, Wetlands, and Marine Resources Management Wildlife and Wildlands Science and Management

Field	GSS Code	Additional Program Titles	
Architecture Fields			
Architecture	940	Landscape Architecture	
Biological Science Fields			
Anatomy	601		
Biochemistry	602	Biochemistry/Biophysics and Molecular Biology	
Biology	603	Biological Sciences	
Biometry and Epidemiology	604	Bioinformatics Biomathematics Biometry/Biometrics	Biostatistics Medical Informatics
Biophysics	605		
Botany	606	Plant Biology Plant Molecular Biology	Plant Pathology/Phytopathology Plant Physiology
Cell and Molecular Biology	607	Cell Biology and Anatomy Cell/Cellular and Molecular Biology Cell/Cellular Biology and Histology Developmental Biology and Embryology	Molecular Biochemistry Molecular Biophysics Neuroanatomy Photobiology Structural Biology
Ecology	608		
Entomology and Parasitology	609		
Genetics	610	Animal Genetics Evolutionary Biology Human/Medical Genetics	Microbial and Eukaryotic Genetics Molecular Genetics Plant Genetics
Microbiology, Immunology, and Virology	611	Medical Microbiology and Bacteriology Mycology	
Neuroscience	950		
Nutrition	612	Foods, Nutrition Human Nutrition	Nutrition Science
Pathology	613	Experimental Pathology	
Pharmacology	614	Environmental Toxicology Molecular Pharmacology Molecular Toxicology	Neuropharmacology Pharmacology and Toxicology Toxicology
Physiology	615	Cell Physiology Exercise Physiology Molecular Physiology Neurobiology and Neurophysiology	Oncology and Cancer Biology Physiology, Pathology, and Related Sciences Reproductive Biology Vision Science/Physiological Optics
Zoology	616	Animal Behavior and Ethology Animal Biology	Animal Physiology Wildlife Biology
Biosciences, not elsewhere classified	617	Aquatic Biology/Limnology Bioethics/Medical Ethics Biological and Life Sciences, Other Biomedical Sciences Biotechnology Conservation Biology	Ecology, Evolution, Systematics and Population Biology Environmental Biology Medical Illustration Population Biology Systematic Biology/Biological Systematics

Field	GSS Code	Additional Program Titles	
Communication Fields			
Communication	930	Communication and Media Studies Communication Studies/Speech Communication and Rhetoric Digital Communication and Media/Multimedia	Health Communication Mass Communication/Media Studies Organizational Communication Political Communication
Computer Science Fields			
Computer Science (exclude DCS)	401	Artificial Intelligence and Robotics Computer and Information Sciences Computer and Information Systems Security Computer Graphics Computer Systems Analysis/Analyst	Computer Systems Networking and Telecommunications Data Modeling/Warehousing and Database Administration Information Science/Studies Information Technology Management Information Systems Management Science
Earth, Atmospheric, and Ocean Science Fields			
Atmospheric Sciences	301	Atmospheric Chemistry and Climatology	Atmospheric Physics and Dynamics Meteorology
Geosciences	302	Geochemistry Geochemistry and Petrology Geology/Earth Science	Geophysics and Seismology Hydrology and Water Resources Science Paleontology
Ocean Sciences	303	Marine Biology and Biological Oceanography	Oceanography, Chemical and Physical
Earth, Atmospheric, and Ocean Sciences, not elsewhere classified	304		
Engineering Fields			
Aerospace Engineering	101	Aeronautical Engineering	Astronautical Engineering
Agricultural Engineering	102	Bioengineering	Biological Engineering
Biomedical Engineering	103	Biomedical/Medical Engineering	Biomedical Technology/ Technician (exclude master's)
Chemical Engineering	104	Polymer/Plastics Engineering	Wood Science and Wood Products/Pulp and Paper Technology
Civil Engineering	105	Architectural Engineering Environmental/Environmental Health Engineering Geotechnical Engineering Structural Engineering	Surveying Engineering Transportation and Highway Engineering Water Resources Engineering
Electrical Engineering	106	Communication Engineering Computer Engineering Computer Hardware Engineering	Computer Software Engineering Electronics Engineering
Engineering Science & Physics	107	Engineering Physics	Engineering Science
Industrial/Manufacturing Engineering	108	Operations Research	Systems Engineering
Mechanical Engineering	109	Engineering Mechanics	
Engineering Fields continued next page			

Field	GSS Code	Additional Program Titles	
Engineering Fields – continued			
Metallurgical and Materials Engineering	110	Ceramic Sciences and Engineering Materials Science	Textile Science Textile Sciences and Engineering
Mining Engineering	111	Geological/Geophysical Engineering Mineral Engineering	
Nuclear Engineering	112		
Petroleum Engineering	113		
Engineering, not elsewhere classified	114	Construction Engineering Forest Engineering Naval Architecture and Marine Engineering	Ocean Engineering
Family and Consumer Sciences/Human Sciences Fields			
Family and Consumer Sciences/Human Sciences	920	Adult Development and Aging Business Family and Consumer Sciences/Human Sciences Child Development Consumer Economics	Family Systems Housing and Human Environments Human Development and Family Studies
Health Fields (see also GSS Code 103)			
Anesthesiology	701	Nurse Anesthetist (exclude master's)	
Cardiology	702	Cardiovascular Science	Cardiovascular Diseases
Communication Disorders Sciences	723	Audiology/Audiologist and Hearing Sciences (exclude AuD) Audiology/Audiologist and Speech Language Pathology/ Pathologist	Communication Disorders Sciences and Services, Other Speech-Language Pathology/Pathologist
Dental Sciences	718	Advanced/Graduate Dentistry and Oral Sciences, Other (exclude DDS) Dental Clinical Sciences, General Dental Hygiene/Hygienist (exclude master's) Dental Materials Dental Public Health and Education	Endodontics/Endodontontology Oral Biology and Oral Pathology Oral/Maxillofacial Surgery Orthodontics/Orthodontontology Pediatric Dentistry/Pedodontics Periodontics/Periodontology Prosthodontics/Prosthodontology
Endocrinology	704	Pediatric Endocrinology	
Gastroenterology	705		
Hematology	706	Pediatric Hematology	
Neurology	707		
Health Fields continued next page			

Field	GSS Code	Additional Program Titles	
Health Fields (see also GSS Code 103) – continued			
Nursing Science (research master's & PhD only)	719		
Nursing (exclude master's & DNP)	719	Adult Health Nurse/Nursing (exclude master's) Clinical Nurse Specialist (exclude master's) Critical Care Nursing (exclude master's) Family Practice Nurse/Nurse Practitioner (exclude master's) Maternal/Child Health and Neonatal Nurse/Nursing (exclude master's) Nurse Midwife/Nursing Midwifery (exclude master's) Nursing – Registered Nurse Training (exclude master's) Nursing Administration (exclude master's)	Nursing, Other (exclude master's) Occupational and Environmental Health Nursing (exclude master's) Pediatric Nurse/Nursing (exclude master's) Perioperative/Operating Room and Surgical Nurse/Nursing (exclude master's) Psychiatric/Mental Health Nurse/Nursing (exclude master's) Public Health/Community Nurse/Nursing (exclude master's)
Obstetrics and Gynecology	708		
Oncology/Cancer Research	703	Pediatric Oncology	
Ophthalmology (exclude OD)	709		
Otorhinolaryngology	710		
Pediatrics	711	Prematurity & Newborn	
Pharmaceutical Sciences (exclude PharmD)	720	Clinical and Industrial Drug Development Industrial and Physical Pharmacy and Cosmetic Sciences Medicinal and Pharmaceutical Chemistry Natural Products Chemistry and Pharmacognosy Pharmaceutics and Drug Design	Pharmacoconomics/ Pharmaceutical Economics Pharmacy Administration/Policy/ Regulatory Affairs (exclude master's) Pharmacy, Pharmaceutical Sciences, and Administration, Other (exclude master's)
Preventive Medicine and Community Health	712	Environmental Health Health Services/Allied Health/Health Sciences Health/Medical Physics International Public Health/ International Health	Maternal and Child Health Occupational Health and Industrial Hygiene Public Health Education and Promotion Public Health Public Health Medicine
Psychiatry	713	Behavioral Medicine (clinical)	Child Psychiatry
Pulmonary Disease	714		
Radiology	715	Radiation Biology/Radiobiology Radiation Oncology/Therapeutic Radiology	Radiation Protection/Health Physics Technician
Surgery	716	Orthopedics/Orthopedic Surgery	
Health Fields continued next page			

Field	GSS Code	Additional Program Titles	
Health Fields (see also GSS Code 103) – continued			
Veterinary Sciences (exclude DVM)	721	Comparative and Laboratory Animal Medicine Large Animal/Food Animal & Equine Surgery/Medicine Small/Companion Animal Surgery and Medicine Veterinary Anatomy Veterinary Biomedical and Clinical Sciences Veterinary Biomedicine and Clinical Sciences	Veterinary Infectious Diseases Veterinary Medicine Veterinary Microbiology and Immunobiology Veterinary Pathology and Pathobiology Veterinary Physiology Veterinary Preventive Med Epidemiology/Public Hlth Veterinary Toxicology and Pharmacology
Clinical Medicine, not elsewhere classified	717	Aerospace Medicine Allergy Clinical Laboratory Medicine Clinical Laboratory Science/Medical Technology/Technologist Clinical/Medical Laboratory Science and Allied Professions, Other (exclude master's) Complementary and Alternative Medicine Connective Tissue Diseases Critical Care Medicine Dermatology Diabetes Emergency Medicine	Family Medicine Infectious Diseases Internal Medicine Gene Therapy HIV/AIDS Liver Diseases Medical Scientist (exclude MD) Metabolic diseases Nephrology Neurology/Neurosurgery Occupational Medicine Palliative Care Physical Medicine and Rehabilitation/Physiatry Trauma Urology
Health-Related, not elsewhere classified	722	Assistive/Augmentative Technology and Rehabilitation Engineering Athletic Training/Trainer - Sports Medicine Exercise Science/Physiology and Movement Studies	Health Professions and Related Clinical Sciences, Other (exclude master's) Occupational Therapy/Therapist (exclude master's and OTD) Physical Therapy/Therapist (exclude master's and DPT)
Interdisciplinary – see Multidisciplinary/Interdisciplinary Studies on page 8			
Mathematical Science Fields			
Mathematics and Applied Mathematics	402	Algebra and Number Theory Analysis and Functional Analysis Computational Mathematics	Geometry/Geometric Analysis Topology and Foundations
Statistics	403	Actuarial Science Business Statistics	Mathematical Statistics and Probability
Multidisciplinary – see Multidisciplinary/Interdisciplinary Studies on page 8			
Neuroscience Fields			
Neuroscience	950		
Physical Science Fields			
Astronomy	201	Astrophysics	Planetary Astronomy and Science
Biochemistry	602	Biochemistry/Biophysics and Molecular Biology	
Physical Science Fields continued next page			

Field	GSS Code	Additional Program Titles	
Physical Science Fields – continued			
Chemistry	202	Analytical Chemistry Chemical Physics Inorganic Chemistry Organic Chemistry	Physical and Theoretical Chemistry Polymer Chemistry
Physics (see also 605)	203	Acoustics Atomic/Molecular Physics Elementary Particle Physics Nuclear Physics Optics/Optical Sciences	Plasma and High-Temperature Physics Solid State and Low-Temperature Physics Theoretical and Mathematical Physics
Physical Sciences, not elsewhere classified	204		
Psychology Fields			
Clinical Psychology (exclude PsyD)	803	Clinical Child Psychology	
Psychology, Combined	801	Psychology, General	
Psychology, except Clinical	802	Art Therapy (exclude master's) Cognitive Psychology and Psycholinguistics Community Psychology Comparative Psychology Counseling Psychology Developmental and Child Psychology Educational Psychology Environmental Psychology Experimental Psychology Family Psychology Forensic Psychology	Geropsychology Health Psychology Industrial and Organizational Psychology Personality Psychology Physiological Psychology/Psychobiology Psychology, Other Psychometrics and Quantitative Psychology Psychopharmacology School Psychology Social Psychology
Social Science Fields			
Agricultural Economics	901	Natural Resource Economics	
Anthropology (Cultural and Social)	902	Archeology	Physical Anthropology
Economics	903	Applied Economics Business/Managerial Economics Development Economics and International Development	Econometrics and Quantitative Economics International Economics
Geography	904	Cartography	
History and Philosophy of Science (combined program)	905	History and Philosophy of Science/Technology	
Linguistics	906	Linguistics of ASL, and Other Sign Languages	
Political Science/Public Administration	907	American Government and Politics Canadian Government and Politics	International Relations and Affairs Political Science and Government Public Policy Analysis
Sociology	908	Demography and Population Studies	
Sociology/Anthropology (combined program)	909		
Social Science Fields continued next page			

Field	GSS Code	Additional Program Titles	
Social Science Fields – continued			
Social Sciences, not elsewhere classified	910	African Studies African-American/Black Studies American Indian/Native American Studies American/United States Studies/Civilization Area Studies Asian Studies/Civilization Asian-American Studies Balkans Studies Baltic Studies Canadian Studies Caribbean Studies Central/Middle and Eastern European Studies Chinese Studies Commonwealth Studies Criminal Justice/Safety Studies Criminalistics and Criminal Science Criminology East Asian Studies Ethnic, Cultural Minority, and Gender Studies, Other European Studies/Civilization Forensic Science and Technology French Studies Gay/Lesbian Studies	German Studies Hispanic-American, Puerto Rican, Mexican American Studies Italian Studies Japanese Studies Korean Studies Labor Studies Latin American Studies Near and Middle Eastern Studies Organizational Behavior Studies Pacific Area/Pacific Rim Studies Polish Studies Regional Studies (US, Canadian, Foreign) Russian Studies Scandinavian Studies Slavic Studies South Asian Studies Southeast Asian Studies Spanish and Iberian Studies Tibetan Studies Ukraine Studies Ural-Altaic and Central Asian Studies Urban Affairs/Studies Western European Studies Women's Studies
Multidisciplinary/Interdisciplinary Studies			
Multidisciplinary/ Interdisciplinary Studies	980	Accounting and Computer Science (combined program) Behavioral Sciences Biological and Physical Sciences Biopsychology Cognitive Science Gerontology Holocaust and Related Studies Intercultural/Multicultural and Diversity Studies International/Global Studies	Mathematics and Computer Science (combined program) Natural Sciences Peace Studies and Conflict Resolution Science, Technology and Society Systems Science and Theory

**Survey of Graduate Students and Postdoctorates in
Science and Engineering (GSS) Fall 2009**

National Science Foundation (NSF) & National Institutes of Health (NIH)

2009 GSS CROSSWALK
Between 2000 NCES Classification of Instructional
Programs (CIP) Codes and GSS Codes

Do not include certificate programs or units that only award professional degrees, such as PharmD, PsyD, Aud, DDS, DPT, JD, or MD.

CIP Code	GSS Code	Description of CIP Field
01.0103	901	Agricultural Economics
01.0603	501	Ornamental Horticulture
01.0701	501	International Agriculture
01.0901	501	Animal Sciences, General
01.0902	501	Agricultural Animal Breeding
01.0903	501	Animal Health
01.0904	501	Animal Nutrition
01.0905	501	Dairy Science
01.0906	501	Livestock Management
01.0907	501	Poultry Science
01.0999	501	Animal Sciences, Other
01.1001	501	Food Science
01.1002	501	Food Technology and Processing
01.1099	501	Food Science and Technology, Other
01.1101	501	Plant Sciences, General
01.1102	501	Agronomy and Crop Science
01.1103	501	Horticultural Science
01.1104	501	Agricultural and Horticultural Plant Breeding
01.1105	501	Plant Protection and Integrated Pest Management
01.1106	501	Range Science and Management
01.1199	501	Plant Sciences, Other
01.1201	501	Soil Science and Agronomy, General
01.1202	501	Soil Chemistry and Physics
01.1203	501	Soil Microbiology
01.1299	501	Soil Sciences, Other
01.9999	501	Agriculture, Agriculture Operations and Related Sciences, Other
03.0101	501	Natural Resources/Conservation, General
03.0103	501	Environmental Studies (GSS Codes 304, 907, 910 also permitted)
03.0104	501	Environmental Science (GSS Codes 304, 617 also permitted)

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
03.0199	501	Natural Resources Conservation and Research, Other
03.0201	501	Natural Resources Management and Policy
03.0204	901	Natural Resource Economics
03.0205	501	Water, Wetlands, and Marine Resources Management
03.0206	501	Land Use Planning and Management/Development
03.0299	501	Natural Resources Management and Policy, Other
03.0301	501	Fishing and Fisheries Sciences and Management
03.0501	501	Forestry, General
03.0502	501	Forest Sciences and Biology
03.0506	501	Forest Management/Forest Resources Management
03.0508	501	Urban Forestry
03.0509	104	Wood Science and Wood Products/Pulp and Paper Technology
03.0510	501	Forest Resources Production and Management
03.0599	501	Forestry, Other
03.0601	501	Wildlife and Wildlands Science and Management
03.9999	501	Natural Resources and Conservation, Other
04.0201	940	Architecture
04.0601	940	Landscape Architecture
05.0101	910	African Studies
05.0102	910	American/United States Studies/Civilization
05.0103	910	Asian Studies/Civilization
05.0104	910	East Asian Studies
05.0105	910	Central/Middle and Eastern European Studies
05.0106	910	European Studies/Civilization
05.0107	910	Latin American Studies
05.0108	910	Near and Middle Eastern Studies
05.0109	910	Pacific Area/Pacific Rim Studies
05.0110	910	Russian Studies
05.0111	910	Scandinavian Studies
05.0112	910	South Asian Studies
05.0113	910	Southeast Asian Studies
05.0114	910	Western European Studies
05.0115	910	Canadian Studies
05.0116	910	Balkans Studies
05.0117	910	Baltic Studies
05.0118	910	Slavic Studies
05.0119	910	Caribbean Studies
05.0120	910	Ural-Altaic and Central Asian Studies

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
05.0121	910	Commonwealth Studies
05.0122	910	Regional Studies (U.S., Canadian, Foreign)
05.0123	910	Chinese Studies
05.0124	910	French Studies
05.0125	910	German Studies
05.0126	910	Italian Studies
05.0127	910	Japanese Studies
05.0128	910	Korean Studies
05.0129	910	Polish Studies
05.0130	910	Spanish and Iberian Studies
05.0131	910	Tibetan Studies
05.0132	910	Ukraine Studies
05.0199	910	Area Studies, Other
05.0201	910	African-American/Black Studies
05.0202	910	American Indian/Native American Studies
05.0203	910	Hispanic-American, Puerto Rican, Mexican American Studies
05.0206	910	Asian-American Studies
05.0207	910	Women's Studies
05.0208	910	Gay/Lesbian Studies
05.0299	910	Ethnic, Cultural Minority, and Gender Studies, Other
09.0101	930	Communication Studies/Speech Communication and Rhetoric
09.0102	930	Mass Communication/Media Studies
09.0199	930	Communication and Media Studies, Other
09.0702	930	Digital Communication and Media/Multimedia
09.0901	930	Organizational Communication, General
09.0904	930	Political Communication
09.0905	930	Health Communication
11.0101	401	Computer and Information Sciences, General (exclude DCS)
11.0102	401	Artificial Intelligence and Robotics (exclude DCS)
11.0103	401	Information Technology (exclude DCS)
11.0199	401	Computer and Information Sciences, Other (exclude DCS)
11.0401	401	Information Science/Studies (exclude DCS)
11.0501	401	Computer Systems Analysis/Analyst (exclude DCS)
11.0701	401	Computer Science (exclude DCS)
11.0802	401	Data Modeling/Warehousing and Database Administration (exclude DCS)
11.0803	401	Computer Graphics (exclude DCS)
11.0901	401	Computer Systems Networking and Telecommunications (exclude DCS)
11.1003	401	Computer and Information Systems Security (exclude DCS)

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
14.0101	114	Engineering, General
14.0201	101	Aerospace, Aeronautical, and Astronautical Engineering
14.0301	102	Agricultural/Biological Engineering and Bioengineering
14.0401	105	Architectural Engineering
14.0501	103	Biomedical/Medical Engineering
14.0601	110	Ceramic Sciences and Engineering
14.0701	104	Chemical Engineering
14.0801	105	Civil Engineering
14.0802	105	Geotechnical Engineering
14.0803	105	Structural Engineering
14.0804	105	Transportation and Highway Engineering
14.0805	105	Water Resources Engineering
14.0899	105	Civil Engineering, Other
14.0901	106	Computer Engineering
14.0902	106	Computer Hardware Engineering
14.0903	106	Computer Software Engineering
14.0999	106	Computer Engineering, Other
14.1001	106	Electrical, Electronics and Communication Engineering
14.1101	109	Engineering Mechanics
14.1201	107	Engineering Physics
14.1301	107	Engineering Science
14.1401	105	Environmental/Environmental Health Engineering
14.1801	110	Materials Engineering
14.1901	109	Mechanical Engineering
14.2001	110	Metallurgical Engineering
14.2101	111	Mining and Mineral Engineering
14.2201	114	Naval Architecture and Marine Engineering
14.2301	112	Nuclear Engineering
14.2401	114	Ocean Engineering
14.2501	113	Petroleum Engineering
14.2701	108	Systems Engineering
14.2801	110	Textile Sciences and Engineering
14.3101	110	Materials Science
14.3201	104	Polymer/Plastics Engineering
14.3301	114	Construction Engineering
14.3401	114	Forest Engineering
14.3501	108	Industrial Engineering
14.3601	108	Manufacturing Engineering

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
14.3701	108	Operations Research
14.3801	105	Surveying Engineering
14.3901	111	Geological/Geophysical Engineering
14.9999	114	Engineering, Other
15.0401	103	Biomedical Technology/Technician (exclude master's)
16.0102	906	Linguistics
16.1602	906	Linguistics of ASL, and Other Sign Languages
19.0101	920	Family and Consumer Sciences/Human Sciences, General
19.0201	920	Business Family and Consumer Sciences/Human Sciences
19.0402	920	Consumer Economics
19.0501	612	Foods, Nutrition
19.0504	612	Human Nutrition
19.0601	920	Housing and Human Environments, General
19.0701	920	Human Development and Family Studies, General
19.0702	920	Adult Development and Aging
19.0704	920	Family Systems
19.0706	920	Child Development
19.0904	110	Textile Science
26.0101	603	Biology/Biological Sciences, General
26.0102	617	Biomedical Sciences, General
26.0202	602	Biochemistry
26.0203	605	Biophysics
26.0204	607	Molecular Biology
26.0205	607	Molecular Biochemistry
26.0206	607	Molecular Biophysics
26.0207	607	Structural Biology
26.0208	607	Photobiology
26.0209	715	Radiation Biology/Radiobiology
26.0210	602	Biochemistry/Biophysics and Molecular Biology (GSS Codes 605, 607 also permitted)
26.0299	602	Biochemistry, Biophysics and Molecular Biology, Other (GSS Codes 605, 607 also permitted)
26.0301	606	Botany/Plant Biology
26.0305	606	Plant Pathology/Phytopathology
26.0307	606	Plant Physiology
26.0308	606	Plant Molecular Biology
26.0399	606	Botany/Plant Biology, Other
26.0401	607	Cell/Cellular Biology and Histology

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
26.0403	601	Anatomy
26.0404	607	Developmental Biology and Embryology
26.0405	607	Neuroanatomy
26.0406	607	Cell/Cellular and Molecular Biology
26.0407	607	Cell Biology and Anatomy (GSS Code 601 also permitted)
26.0499	607	Cell/Cellular Biology and Anatomical Sciences, Other (GSS Code 601 also permitted)
26.0502	611	Microbiology, General
26.0503	611	Medical Microbiology and Bacteriology
26.0504	611	Virology
26.0505	609	Parasitology
26.0506	611	Mycology
26.0507	611	Immunology
26.0599	611	Microbiological Sciences and Immunology, Other
26.0701	616	Zoology/Animal Biology
26.0702	609	Entomology
26.0707	616	Animal Physiology
26.0708	616	Animal Behavior and Ethology
26.0709	616	Wildlife Biology
26.0799	616	Zoology/Animal Biology, Other
26.0801	610	Genetics
26.0802	610	Molecular Genetics
26.0803	610	Microbial and Eukaryotic Genetics
26.0804	610	Animal Genetics
26.0805	610	Plant Genetics
26.0806	610	Human/Medical Genetics
26.0899	610	Genetics, Other
26.0901	615	Physiology, General
26.0902	615	Molecular Physiology
26.0903	615	Cell Physiology
26.0904	704	Endocrinology
26.0905	615	Reproductive Biology (GSS Codes 601, 616 also permitted)
26.0906	615	Neurobiology and Neurophysiology (GSS Codes 602, 603 also permitted)
26.0907	702	Cardiovascular Science
26.0908	615	Exercise Physiology
26.0909	615	Vision Science/Physiological Optics
26.0910	613	Pathology/Experimental Pathology
26.0911	615	Oncology and Cancer Biology

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
26.0999	615	Physiology, Pathology, and Related Sciences, Other (GSS Code 613 also permitted)
26.1001	614	Pharmacology
26.1002	614	Molecular Pharmacology
26.1003	614	Neuropharmacology
26.1004	614	Toxicology
26.1005	614	Molecular Toxicology
26.1006	614	Environmental Toxicology
26.1007	614	Pharmacology and Toxicology
26.1099	614	Pharmacology and Toxicology, Other
26.1101	604	Biometry/Biometrics
26.1102	604	Biostatistics
26.1103	604	Bioinformatics
26.1199	604	Biomathematics and Bioinformatics, Other
26.1201	617	Biotechnology
26.1301	608	Ecology
26.1302	303	Marine Biology and Biological Oceanography
26.1303	610	Evolutionary Biology
26.1304	617	Aquatic Biology/Limnology
26.1305	617	Environmental Biology
26.1306	617	Population Biology
26.1307	617	Conservation Biology
26.1308	617	Systematic Biology/Biological Systematics
26.1309	604	Epidemiology
26.1399	617	Ecology, Evolution, Systematics and Population Biology, Other
26.9999	617	Biological and Life Sciences, Other
27.0101	402	Mathematics
27.0102	402	Algebra and Number Theory
27.0103	402	Analysis and Functional Analysis
27.0104	402	Geometry/Geometric Analysis
27.0105	402	Topology and Foundations
27.0199	402	Mathematics, Other
27.0301	402	Applied Mathematics
27.0303	402	Computational Mathematics
27.0399	402	Applied Mathematics, Other
27.0501	403	Statistics
27.0502	403	Mathematical Statistics and Probability
27.0599	403	Statistics, Other

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
27.9999	402	Mathematics and Statistics, Other
30.0101	980	Biological and Physical Sciences
30.0501	980	Peace Studies, and Conflict Resolution
30.0601	980	Systems Science and Theory
30.0801	980	Mathematics and Computer Science (combined program)
30.1001	980	Biopsychology
30.1101	980	Gerontology
30.1501	980	Science, Technology and Society
30.1601	980	Accounting and Computer Science (combined program)
30.1701	980	Behavioral Sciences
30.1801	980	Natural Sciences
30.1901	612	Nutrition Science
30.2001	980	International/Global Studies
30.2101	980	Holocaust and Related Studies
30.2301	980	Intercultural/Multicultural and Diversity Studies
30.2401	950	Neuroscience
30.2501	980	Cognitive Science
30.9999	980	Multi-/Interdisciplinary Studies, Other
31.0505	722	Exercise Science/Physiology and Movement Studies
40.0101	204	Physical Sciences
40.0201	201	Astronomy
40.0202	201	Astrophysics
40.0203	201	Planetary Astronomy and Science
40.0299	201	Astronomy and Astrophysics, Other
40.0401	301	Atmospheric Sciences and Meteorology
40.0402	301	Atmospheric Chemistry and Climatology
40.0403	301	Atmospheric Physics and Dynamics
40.0404	301	Meteorology
40.0499	301	Atmospheric Sciences and Meteorology, Other
40.0501	202	Chemistry
40.0502	202	Analytical Chemistry
40.0503	202	Inorganic Chemistry
40.0504	202	Organic Chemistry
40.0506	202	Physical and Theoretical Chemistry
40.0507	202	Polymer Chemistry
40.0508	202	Chemical Physics
40.0599	202	Chemistry, Other
40.0601	302	Geology/Earth Science, General

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
40.0602	302	Geochemistry
40.0603	302	Geophysics and Seismology
40.0604	302	Paleontology
40.0605	302	Hydrology and Water Resources Science
40.0606	302	Geochemistry and Petrology
40.0607	303	Oceanography, Chemical and Physical
40.0699	302	Geological and Earth Sciences/Geosciences, Other
40.0801	203	Physics
40.0802	203	Atomic/Molecular Physics
40.0804	203	Elementary Particle Physics
40.0805	203	Plasma and High-Temperature Physics
40.0806	203	Nuclear Physics
40.0807	203	Optics/Optical Sciences
40.0808	203	Solid State and Low - Temperature Physics
40.0809	203	Acoustics
40.0810	203	Theoretical and Mathematical Physics
40.0899	203	Physics, Other
40.9999	204	Physical Sciences, Other
42.0101	801	Psychology, General
42.0201	803	Clinical Psychology (exclude PsyD)
42.0301	802	Cognitive Psychology and Psycholinguistics
42.0401	802	Community Psychology
42.0501	802	Comparative Psychology
42.0601	802	Counseling Psychology
42.0701	802	Developmental and Child Psychology
42.0801	802	Experimental Psychology
42.0901	802	Industrial and Organizational Psychology
42.1001	802	Personality Psychology
42.1101	802	Physiological Psychology/Psychobiology
42.1601	802	Social Psychology
42.1701	802	School Psychology
42.1801	802	Educational Psychology
42.1901	802	Psychometrics and Quantitative Psychology
42.2001	803	Clinical Child Psychology (exclude PsyD)
42.2101	802	Environmental Psychology
42.2201	802	Geropsychology
42.2301	802	Health Psychology
42.2401	802	Psychopharmacology

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
42.2501	802	Family Psychology
42.2601	802	Forensic Psychology
42.9999	802	Psychology, Other
43.0104	910	Criminal Justice/Safety Studies
43.0106	910	Forensic Science and Technology
43.0111	910	Criminalistics and Criminal Science
44.0401	907	Public Administration
44.0501	907	Public Policy Analysis
45.0101	910	Social Sciences, General
45.0201	902	Anthropology
45.0202	902	Physical Anthropology
45.0299	902	Anthropology, Other
45.0301	902	Archeology
45.0401	910	Criminology
45.0501	908	Demography and Population Studies
45.0601	903	Economics
45.0602	903	Applied Economics
45.0603	903	Econometrics and Quantitative Economics
45.0604	903	Development Economics and International Development
45.0605	903	International Economics
45.0699	903	Economics, Other
45.0701	904	Geography
45.0702	904	Cartography
45.0799	904	Geography, Other
45.0901	907	International Relations and Affairs
45.1001	907	Political Science and Government, General
45.1002	907	American Government and Politics
45.1003	907	Canadian Government and Politics
45.1099	907	Political Science and Government, Other
45.1101	908	Sociology
45.1201	910	Urban Affairs/Studies
45.9999	910	Social Sciences, Other
51.0000	712	Health Services/Allied Health/Health Sciences, General
51.0201	723	Communication Disorders, General
51.0202	723	Audiology/Audiologist and Hearing Sciences (exclude AuD)
51.0203	723	Speech-Language Pathology/Pathologist
51.0204	723	Audiology/Audiologist and Speech Language Pathology/Pathologist
51.0299	723	Communication Disorders Sciences and Services, Other

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
51.0501	718	Dental Clinical Sciences, General
51.0503	718	Oral Biology and Oral Pathology
51.0504	718	Dental Public Health and Education
51.0505	718	Dental Materials
51.0506	718	Endodontics/Endodontontology
51.0507	718	Oral/Maxillofacial Surgery
51.0508	718	Orthodontics/Orthodontontology
51.0509	718	Pediatric Dentistry/Pedodontics
51.0510	718	Periodontics/Periodontology
51.0511	718	Prosthodontics/Prosthodontontology
51.0599	718	Advanced/Graduate Dentistry and Oral Sciences, Other (Exclude DDS)
51.0602	718	Dental Hygiene/Hygienist (exclude master's)
51.0913	722	Athletic Training/Trainer - Sports Medicine
51.0916	715	Radiation Protection/Health Physics Technician
51.1005	717	Clinical Laboratory Science/Medical Technology/Technologist
51.1099	717	Clinical/Medical Laboratory Science and Allied Professions, Other (exclude master's)
51.1401	717	Medical Scientist (Exclude MD)
51.1601	719	Nursing - Registered Nurse Training (exclude master's and DNP)
51.1602	719	Nursing Administration (exclude master's and DNP)
51.1603	719	Adult Health Nurse/Nursing (exclude master's and DNP)
51.1604	701	Nurse Anesthetist (exclude master's and DNP)
51.1605	719	Family Practice Nurse/Nurse Practitioner (exclude master's and DNP)
51.1606	719	Maternal/Child Health and Neonatal Nurse/Nursing (exclude master's and DNP)
51.1607	719	Nurse Midwife/Nursing Midwifery (exclude master's and DNP)
51.1608	719	Nursing Science (exclude DNP)
51.1609	719	Pediatric Nurse/Nursing (exclude master's and DNP)
51.1610	719	Psychiatric/Mental Health Nurse/Nursing (exclude master's and DNP)
51.1611	719	Public Health/Community Nurse/Nursing (exclude master's and DNP)
51.1612	719	Perioperative/Operating Room and Surgical Nurse/Nursing (exclude master's and DNP)
51.1616	719	Clinical Nurse Specialist (exclude master's and DNP)
51.1617	719	Critical Care Nursing (exclude master's and DNP)
51.1618	719	Occupational and Environmental Health Nursing (exclude master's and DNP)
51.1699	719	Nursing, Other (exclude master's and DNP)
51.2002	720	Pharmacy Administration/Policy/Regulatory Affairs (exclude master's and PharmD)

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
51.2003	720	Pharmaceutics and Drug Design (exclude PharmD)
51.2004	720	Medicinal and Pharmaceutical Chemistry (exclude PharmD)
51.2005	720	Natural Products Chemistry and Pharmacognosy (exclude PharmD)
51.2006	720	Clinical and Industrial Drug Development (exclude PharmD)
51.2007	720	Pharmacoeconomics/Pharmaceutical Economics (exclude PharmD)
51.2009	720	Industrial and Physical Pharmacy and Cosmetic Sciences (exclude PharmD)
51.2099	720	Pharmacy, Pharmaceutical Sciences, and Administration, Other (exclude master's and PharmD)
51.2201	712	Public Health, General
51.2202	712	Environmental Health
51.2205	712	Health/Medical Physics
51.2206	712	Occupational Health and Industrial Hygiene
51.2207	712	Public Health Education and Promotion
51.2208	712	Community Health and Preventive Medicine
51.2209	712	Maternal and Child Health
51.2210	712	International Public Health/International Health
51.2301	802	Art Therapy (exclude master's)
51.2306	722	Occupational Therapy Therapist (exclude master's and OTD)
51.2308	722	Physical Therapy Therapist (exclude master's and DPT)
51.2312	722	Assistive/Augmentative Technology and Rehabilitation Engineering
51.2501	721	Veterinary Biomedicine and Clinical Sciences (exclude DVM)
51.2502	721	Veterinary Anatomy (exclude DVM)
51.2503	721	Veterinary Physiology (exclude DVM)
51.2504	721	Veterinary Microbiology and Immunobiology (exclude DVM)
51.2505	721	Veterinary Pathology and Pathobiology (exclude DVM)
51.2506	721	Veterinary Toxicology and Pharmacology (exclude DVM)
51.2507	721	Large Animal/Food Animal & Equine Surgery/Medicine (exclude DVM)
51.2508	721	Small/Companion Animal Surgery and Medicine (exclude DVM)
51.2509	721	Comparative and Laboratory Animal Medicine (exclude DVM)
51.2510	721	Veterinary Preventive Med Epidemiology/Public Hlth (exclude DVM)
51.2511	721	Veterinary Infectious Diseases (exclude DVM)
51.2599	721	Veterinary Biomedical and Clinical Sciences, Other (exclude DVM)
51.2703	617	Medical Illustration
51.2706	604	Medical Informatics
51.3201	617	Bioethics/Medical Ethics
51.9999	722	Health Professions and Related Clinical Sciences, Other (exclude master's)
52.0601	903	Business/Managerial Economics

2009 GSS CROSSWALK—Continued

CIP Code	GSS Code	Description of CIP Field
52.1003	910	Organizational Behavior Studies
52.1004	910	Labor Studies
52.1201	401	Management Information Systems, General (exclude DCS)
52.1301	401	Management Science, General (exclude DCS)
52.1302	403	Business Statistics
52.1304	403	Actuarial Science
54.0104	905	History and Philosophy of Science/Technology (combined program)

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